

Organizers:  
Dr. Jennifer Culbertson,  
Prof. Andrew Perfors,  
Dr. Hugh Rabagliati, &  
Dr. Veronica Ramenzoni

27 – 30 July 2022  
Toronto, Ontario, Canada

# Program for the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society



**COGNITIVE  
DIVERSITY**

CogSci 2022

[bit.ly/3N55tRP](https://bit.ly/3N55tRP)

**#CogSci2022**

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## DEAR COLLEAGUES

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Welcome to the 44th Annual Conference of the Cognitive Science Society! After two years of virtual conferences, this will be our first fully hybrid meeting. We are excited to see many of you in person, and very happy that many more will be able to join us remotely.

This year's conference brings together the latest research across all of Cognitive Science and also highlights the theme of Cognitive Diversity. Our plenaries and symposia showcase the importance of diversity at multiple levels for cognitive science today. We examine how investigating cognition across human populations contributes to our understanding of diverse ways of thinking and communicating---as well as underlying commonalities. We explore how social cognition operates in diverse societies. And we examine the role of cognitive science in addressing some of the major challenges of our increasingly globalized world. These themes are addressed through plenaries by Emily M. Bender, Yoshihisa Kashima, and Neil Lewis, Jr., as well as three invited symposia and a special symposium and workshop organized by the SPARK Society.

In addition, the programme includes a keynote presentation by the Rumelhart Prize winner Michael Tomasello, a symposium to celebrate Frank Ramus (the winner of the Elman Prize), and a symposium for the Robert J. Glushko Dissertation Awards. The contributed programme reports the latest ideas and discoveries in cognitive science, through a combination of longer spoken presentations, in-person posters, remote flash talks, workshops, tutorials, and symposia.

Our new hybrid set-up is designed to make the conference accessible to all. Spoken sessions will all be a mix of in-person and remote speakers, while remote audience members will be able to easily contribute and ask questions. In-person posters have been reintroduced, and we also have a novel flash talk format in place of remote poster sessions. These 5 minute talks plus question periods allow presenters to concisely explain their research to a wide audience. Finally, all presentations will be uploaded to the Underline system for access in posterity.

We are all thrilled to see this event come together, and hope that you enjoy it!

## ACKNOWLEDGMENTS

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We are extremely grateful to everyone who contributed to the planning and organization of this year's Cognitive Science hybrid meeting. This includes all authors who submitted their contributions, and especially the 959 reviewers and 158 meta-reviewers who generously donated their expertise and time to evaluate the submissions.

Planning for this conference began in October 2020, and it could not have been organized without the advice of Anna Papafragou and Kenny Smith (as Chairs of the Society) and Anna Drummey and Erica Wojcik (as Executive Officers). The staff at Podium Conferences, particularly Lauren Moline, made conference logistics look easy, while David Cserjan proved a master at handling PCS.

We also thank the many Committee Members who reviewed member abstracts, symposia, and workshops, decided on conference awards, and assembled teams of volunteers. We list all of these people in the following pages.

The transition to a hybrid conference has been a major challenge, helped by the contribution of a large number of people - and the willingness of the Cognitive Science Society to underwrite its considerable expense. For their work in planning this we are grateful to Stephanie Denison, Charles Kemp, Abhilasha Kumar, Anna Papafragou, Lilia Rissman, Michelle Smith and Lauren Moline at Podium, and particularly Kenny Smith.

Finally, we are grateful to the Cognitive Science Society and to the sponsors of this conference, including The Robert J. Glushko and Pamela Samuelson Foundation, Duolingo and Finding Five, as well as the Exhibitors, for their support.

Enjoy this hybrid conference and, if you are visiting, enjoy Toronto!

Your Program Co-Chairs,

**Jennifer Culbertson**, *University of Edinburgh*

**Andrew Perfors**, *University of Melbourne*

**Hugh Rabagliati**, *University of Edinburgh*

**Veronica Ramenzoni**, *CONICET-Buenos Aires*



# ORGANIZING COMMITTEE

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## Program

Jennifer Culbertson  
Andrew Perfors  
Hugh Rabagliati  
Veronica Ramenzoni

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## Technical Chair

David Cserjan  
Lauren Moline

---

## Awards

Veronica Ramenzoni  
Natalie Sebanz  
Joe Austerweil  
Emily Ward

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## Diversity & Inclusion Committee

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Mehrnoosh Ahmadi  
Arielle Borovsky  
Sylvain Bruni  
Ray Wai-Lok Cheung  
Anna Drummey  
Joshua Chiroma Gandhi  
Catherine Holland  
Joanna Korman  
Jose Nicolas Murgueitio Meneses  
David Olali  
Tanya Maria Paes  
Rista Plate

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## Member Abstracts

Katherine White  
Charles Davis  
Stephen Ferrigno  
Doug Markant  
Srdan Medimorec  
Emma Tecwyn

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## Publication-Based Talks

Elisabeth Karuze  
Joe Austerweil  
Sarah Creel  
David Danks

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## Social Media & Graphics

Marcelo Viridiano

---

## Society Conference Committee

Anna Papafragou  
Stephanie Denison  
Dan Grodner  
Roger Levy  
Kenny Smith

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## Sponsorship

Roger Levy  
Tom Griffiths  
Mutsumi Imai  
Peter Rantasa

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## Symposia

Gary Cottrell  
Morton Gernsbacher

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## Tutorials and Workshops

Elizabeth Bonawitz  
Naomi Feldman  
John McCoy  
Iris van Rooij

---

## Hybridisation

Kenny Smith  
Stephanie Denison  
Charles Kemp  
Abhilasha Kumar  
Andrew Perfors  
Lilia Rissman  
Michelle Smith  
Hugh Rabagliati

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## Session & Technical Chairs

Stephanie Denison  
Jiangtian Li  
Hugh Rabagliati

## PROGRAM COMMITTEE

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Omri Abend	Naomi Feldman	Chris Lucas	Steven Sloman
Dor Abrahamson	Stephen Ferrigno	George Luger	Kenny Smith
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Florencia Anggoro	Ori Friedman	Michael Mack	Heike Tappe
Joseph Austerweil	Wayne Fu	Mora Maldonado	Emma Tecwyn
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Judith Fan	Hongjing Lu	Noam Siegelman	

## COGSCI 2022 ORGANIZERS

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**Dr. Jennifer Culbertson** *Edinburgh*

Experimental linguist, cognitive scientist and Reader in the Centre for Language Evolution at the University of Edinburgh



**Prof. Andrew Perfors** *Melbourne*

Deputy Director of the Complex Human Data Hub in the University of Melbourne School of Psychological Sciences.



**Dr. Hugh Rabagliati** *Edinburgh*

Reader in the School of Philosophy, Psychology & Language Sciences at the University of Edinburgh, where he studies language development and psycholinguistics, with a focus on words and their meanings.



**Dr. Veronica Ramenzoni** *CONICET - Buenos Aires*

Experimental psychologist, cognitive scientist, and researcher at the National Scientific and Research Council in Argentina.



# SOCIETY INFORMATION

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## ABOUT THE COGNITIVE SCIENCE SOCIETY

The Cognitive Science Society brings together researchers from around the world who hold a common goal: understanding the nature of the human mind. The mission of the Society is to promote Cognitive Science as a discipline, and to foster scientific interchange among researchers in various areas of study, including Artificial Intelligence, Linguistics, Anthropology, Psychology, Neuroscience, Philosophy, and Education. The Society is a non-profit professional organization and its activities include sponsoring an annual conference and publishing the journals *Cognitive Science* and *TopiCS*.

## GOVERNANCE

### EXECUTIVE GOVERNING BOARD

**Chair Kenny Smith**, *University of Edinburgh*  
**Future Chair Adele Goldberg**, *Princeton University*  
**Past Chair Kevin Gluck**, *Resilient Cognitive Solutions*  
**Executive Officer Erica Hsiung Wojcik**, *Skidmore College*  
**Treasurer Brett Martensen**, *Adaptron Inc.*

### BOARD MEMBERS

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**Morteza Dehghani**, *University of Southern California*  
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**Tilbe Göksun**, *Koç University*  
**Cleotilde Gonzalez**, *Carnegie Mellon University*  
**Mutsumi Imai**, *Keio University*  
**Charles Kemp**, *University of Melbourne*  
**Roger Levy**, *Massachusetts Institute of Technology*  
**Asifa Majid**, *University of Oxford*  
**Anna Papafragou**, *University of Pennsylvania*  
**Natalie Sebanz**, *Central European University*  
**Intan K. Wardhani**, *Ghent University*

## EX-OFFICIO OFFICERS

Cognitive Science Journal Editor: **Rick Dale**, *UCLA*

TopiCS in Cognitive Science Journal Editor: **Andrea Bender**, *University of Bergen*

Rumelhart Prize Committee Chair: **Richard P. Cooper**, *Birkbeck, University of London*

Glushko Prize Committee Chair: **David Danks**, *University of California, San Diego*

Elman Prize Committee Chair: **Nora Newcombe**, *Temple University*

## ADMINISTRATION

### CSS STAFF

Outreach Coordinator: **Monique Crouse**, *University of California, Santa Cruz*

Content Production Manager: **Marcelo Viridiano**, *FrameNet Brasil*

### ASSOCIATION SECRETARIAT AND CONFERENCE MANAGEMENT

Administrator: **Marischal De Armond**

Senior Association Manager: **Cendrine De Vis**

Conference and Association Manager: **Lauren Moline**

Junior Conference and Association Manager: **Iris Elias**

Association Assistant: **Vivek Punwani**

### COGNITIVE SCIENCE SOCIETY BUSINESS MEETING

The Cognitive Science Society Business Meeting is scheduled for **Saturday, July 30 at 11:30** in *Room 102, the John W.H. Bassett Theatre* at the Metro Toronto Convention Center.

## MEMBERSHIP INFORMATION

Your membership dues help support important activities by the Society, including our expanding accessibility, communications, diversity, and environmental responsibility initiatives. Most importantly, members help us achieve our mission to expand our understanding of the human mind, to promote Cognitive Science as a discipline, and to foster scientific interchange among researchers in various areas of study, including Anthropology, Artificial Intelligence, Education, Linguistics, Neuroscience, Philosophy and Psychology.

In addition to the connections you will make with fellow members, your CSS membership also includes access to the following:

- Ability to participate in society elections
- Opportunities for professional development and networking
- Web-based electronic access to Cognitive Science Journal and Topics in Cognitive Science (TopiCS)
- Reduced registration fees at the Annual Meeting of the Cognitive Science Society
- Reduced subscription rates to the journals Trends in Cognitive Sciences, Trends in Neurosciences, and Connection Science
- Reduced subscription rate to the Journal of Experimental and Theoretical Artificial Intelligence
- Discounted book prices from select publishers
- Online access to Policy Insights from the Behavioral and Brain Sciences

## COGNITIVE SCIENCE SOCIETY GROVE

The Cognitive Science Society has established the CogSci Grove which aims to mobilise cognitive scientists to offset carbon emissions associated with their professional activities. To date, 1681 trees have been planted in protected sites in the Scottish Highlands where they will create homes for wildlife and forests for the future.

More information is available on [the website](#).

# CONFERENCE SERVICES

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## REGISTRATION

If you registered online, Pre-Registered Delegate Check-In is located at the Registration Desk at the bottom of the escalators on Level 100, North Building of the Metro Toronto Convention Center.

If you need to register now, you can complete [Onsite Registration](#) or go to the Registration Desk at the bottom of the escalators on Level 100, North Building of the Metro Toronto Convention Center.

Delegates who have registered and paid in advance will receive an email from Underline, the virtual platform provider with the direct link to enter the platform. Delegates can also access the Underline site via the CogSci 2022 website.

## REGISTRATION HOURS

Wednesday, July 27	08:00 – 16:00
Thursday, July 28	07:30 – 16:00
Friday, July 29	08:00 – 16:00
Saturday, July 30	08:00 – 15:00

Anyone who has pre-selected to receive a Certificate of Attendance can pick this up at the Registration desk.

## CODE OF CONDUCT

By entering the virtual platform and participating in CogSci 2022 you are agreeing to the CogSci 2022 Code of Conduct. To read the code of conduct, please click [here](#)

## TECHNICAL HELP DURING THE VIRTUAL CONFERENCE

If you encounter any technical issues during your virtual experience, please contact the software provider directly, by either visiting the 'Help Desk' while online, or emailing [cogsci2022@underline.io](mailto:cogsci2022@underline.io).

## LOST AND FOUND

Lost and Found is located at Registration. The Cognitive Science Society is not responsible for any missing or stolen personal items.

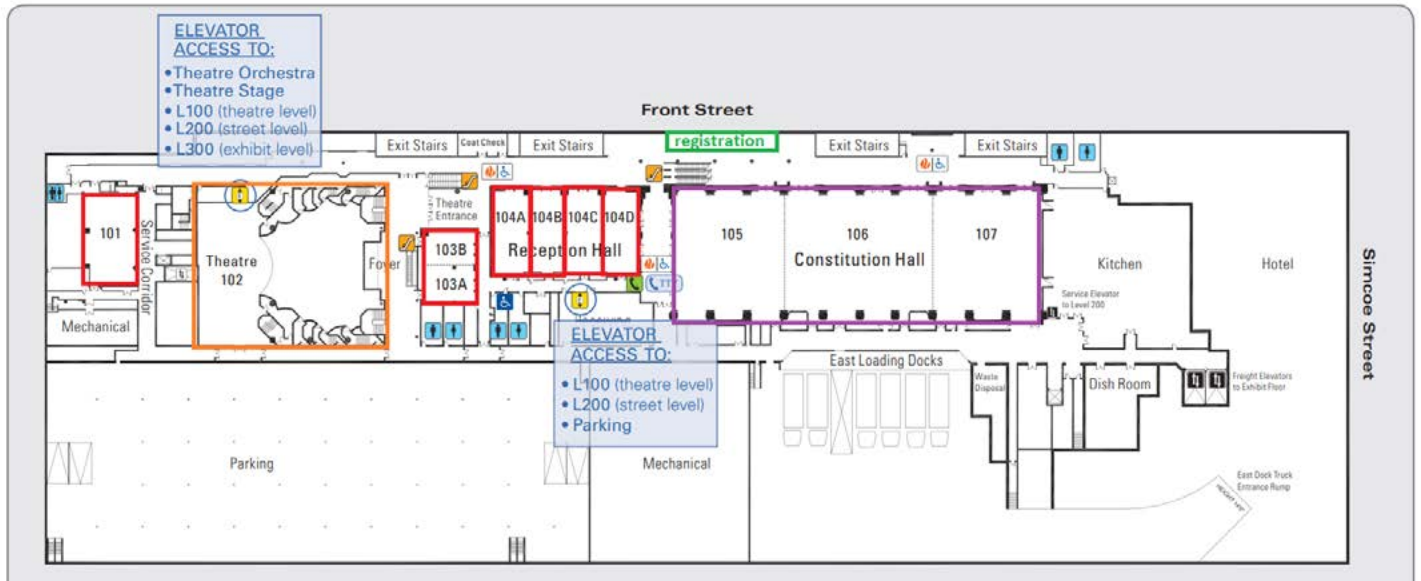
## IN CASE OF EMERGENCY

In case of an emergency please do not call 911 first; instead call our Security at 416-585-8160 or 8160 from a House Phone. First Aid services if contracted thru the MTCC can also be reached at this number and the first aid station is located on 200 level behind room 204.

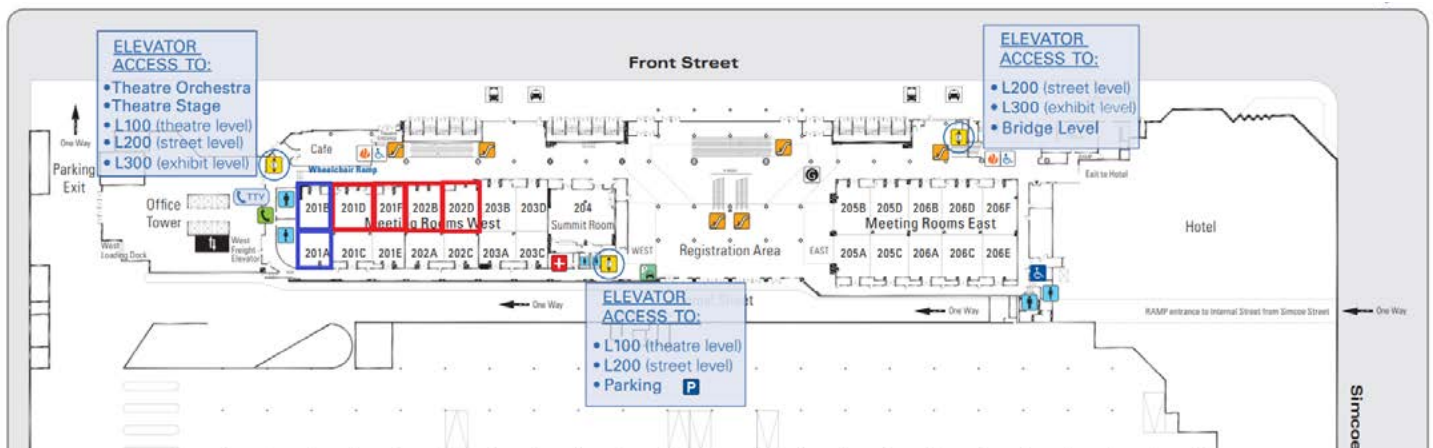
## COAT CHECK

We will have a coat racks available at the Registration Desk for your use during conference hours. Please do not leave any valuables with the coat check.

## METRO TORONTO CONFERENCE CENTER



- Registration (green)
- Theatre (orange)
- Meeting Rooms (red)
- Posters, Exhibitors & Coffee Breaks (purple)
- Additional Space & Parenting Room (blue)



## PARENTING ROOM

The Parenting Room is located in room 201A. The room will be available during the hours noted below:

Wednesday, July 27	08:00 – 16:00
Thursday, July 28	07:30 – 17:00
Friday, July 29	08:00 – 17:00
Saturday, July 30	08:00 – 17:00



## COFFEE BREAKS & LUNCH

Morning and afternoon coffee breaks will be located in Constitution Hall with the Posters and exhibitors. Coffee and tea are complimentary.

Nearby the venue, there are various café's & Restaurants for you to use during Lunch Breaks:

### Simcoe Place Food Court 200 Front St W

*Directly across the street from the MTCC north building:*

Bourbon St Grill • **Green Curry** • Fresh West • **Manchu Wok** • McDonald's • **Mr. Souvlaki** • Pumpenickels • **Tim Horton's** • Subway • **Tabouli** Umi Sushi

### Metro Hall Food Court 200 Wellington St W

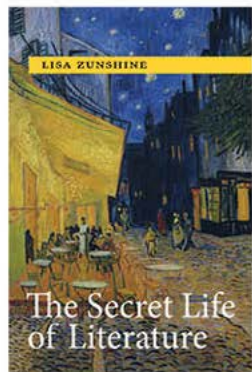
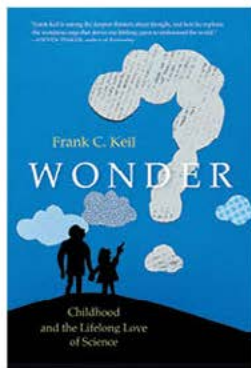
*One block north of Front St.*

**Booster Juice** • Brioche Dorée • **California Thai** • Harvest Green • **Jimmy the Greek** • Koha Kitchen • **Kupfert and Kim** • Manchu Wok • **Soup Nutsy** • Starbucks • Subway • Sushi Shop • **Tim Horton's**

### Additional Options

**Second Cup** 255 Front St W Street Level of the MTCC • **Starbucks** 300 Front St W Corner of Front & John St • **Boston Pizza** 250 Front St W Corner of Front & John St

**Scaddabush Italian Kitchen/Bar** 200 Front St W Corner of Front & Simcoe St • **Chipotle Mexican Grill** 151 Front St W • **The Landing Group** 123 Front St W Corner of Front & York St • **Jack Astor's** 144 Front St W Corner of Front & York St • **Loose Moose** 146 Front St



## MIT Press @ CogSci 2022

### The Evolution of Agency

**By Michael Tomasello,**  
**DAVID E. RUMELHART**  
**PRIZE WINNER**

A leading developmental psychologist proposes an evolutionary pathway to human psychological agency.

9780262047005 | \$30.00  
September 2022

### Wonder

Childhood and the Lifelong Love of Science

**By Frank C. Keil**

How we can all be lifelong wonderers: restoring the sense of joy in discovery we felt as children.

9780262046497 | \$35.00

### How to Stay Smart in a Smart World

**By Gerd Gigerenzer**

How to stay in charge in a world populated by algorithms that beat us in chess, find us romantic partners, and tell us to "turn right in 500 yards."

9780262046954 | \$29.95  
August 2022

### Language vs. Reality

**By N. J. Enfield**

A fascinating examination of how we are both played by language and made by language: the science underlying the bugs and features of humankind's greatest invention.

9780262046619 | \$32.95

### The Art of Abduction

**By Igor Douven**

A novel defense of abduction, one of the main forms of nondeductive reasoning.

9780262046701 | \$50.00

### The Secret Life of Literature

**By Lisa Zunshine**

An innovative account that brings together cognitive science, ethnography, and literary history to examine patterns of "mindreading" in a wide range of literary works.

9780262046336 | \$40.00

**Visit us at our booth to learn more about these books and more**

## COGNITIVE SCIENCE SOCIETY BUSINESS MEETING

The Cognitive Science Society Business Meeting is scheduled for Saturday, July 30 at 11:30 in Room 102, the John W.H. Bassett Theatre at the Metro Toronto Convention Center.

## ONLINE AND ON-DEMAND PROGRAM ACCESS

The full conference program and virtual access to livestreamed content as well as on-demand recorded conference content is available from [Underline](#), login with the email address used for your registration to the 2022 CogSci conference and will be available until July 2024.

## CONFERENCE ACCESS

### Internet Access

Free Wireless Internet (best for checking email)

Network: **CogSci2022** Password: **pw22cogsci**

## AFFINITY AND DISCUSSION GROUPS

CogSci 2022 is pleased to announce a series of Affinity and Discussion Group sessions, which are scheduled to take place during the conference. You can [register online](#) to participate in the following Affinity Groups:

### *Diverse careers in cognitive science*

Virtual Thursday, July 28, 10:00 – 11:15 EDT

### *Non-traditional career paths for cognitive scientists*

Virtual Monday, July 25, 9:00 – 10:00 EDT or

Onsite Room 103 Thursday, July 28, 17:00 – 18:00 EDT

### *Laschool and worldwide diverse cognitive science*

Onsite Room 101 Thursday, July 28th, 16:40 – 18:15 EDT

### *Neurodiversity discussion group*

Virtual Thursday, July 28, 16:40 – 18:15 EDT

### *Neural Nets for Cognition*

Onsite Room 104A Thursday, July 28th, 16:40 – 18:15 EDT

These sessions are free to attend for all CogSci 2022 delegates. Please view the website for further information including dates of the scheduled session.

## Q&A Sessions

As a fully hybrid event, every session will be presented and livestreamed without any pre-recordings. Q&A will be live at the end of the session alternating questions from onsite and online attendees. Additionally there are text areas for questions in the Underline platform for any on-demand attendees.

## PROCEEDINGS INFORMATION

The full proceedings are available as a PDF document and in HTML format at:  
[cognitivesciencesociety.org/program/](https://cognitivesciencesociety.org/program/)

### e-scholarship

The proceedings for past years' conferences are available at:  
[cognitivesciencesociety.org/past-conferences/](https://cognitivesciencesociety.org/past-conferences/)

## PRESENTATION INSTRUCTIONS

### Oral presentations:

Each standard oral presentation is allocated 20 minutes, which is to include a closing period for addressing questions from attendees. A recommended partitioning of this time is 15 minutes of presentation followed by 5 minutes of questions (and for transition). Each room is equipped with a video projector with HDMI input, as well as a microphone. The projectors support 16:9 aspect ratio (widescreen format). Laptops and tech support are supplied to each room including the link to virtual attendees.

Presentations that are part of workshops, tutorials, awards panels or symposia sessions may use different schedules. Please contact the organizer of the given workshop, tutorial, or symposium for information about the correct amount of presentation time.

### Session Chairs:

Each room will have signs that the chair can use to signal to the speaker how much time is left. Assigned session chairs will quickly announce each speaker in the order listed and strictly monitor the time of each talk.

### Virtual Flash Talk presentations:

Each virtual flash talk presentation is allocated 5 minutes within a 45min block of time. Any extra time at the end of the session time can be used for questions. Additional questions can be made directly to every poster presenter through Underline by text. These presentations are made entirely virtually but projected into a room at the Metro Toronto Convention Center for onsite attendees to watch. Tech support is supplied to each room to ensure a smooth link between onsite and virtual attendees.

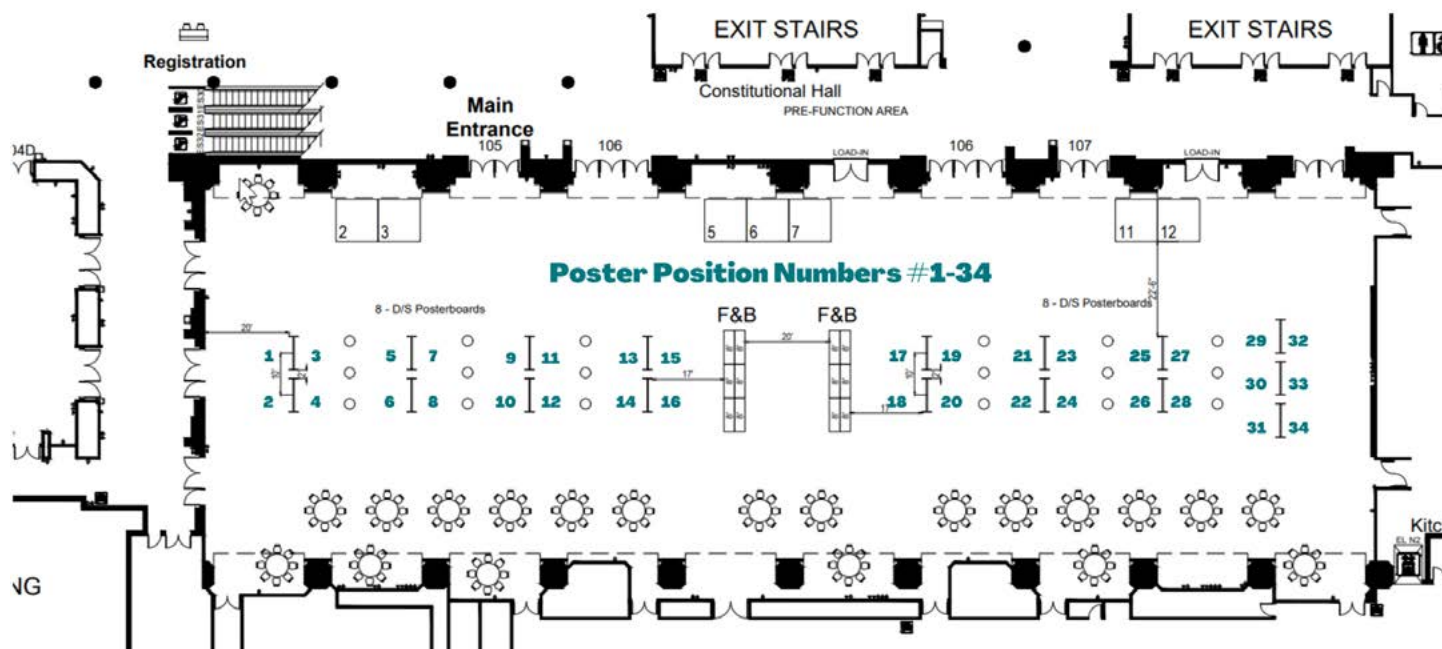
### Poster presentations:

In-person Posters will be presented on poster boards during the poster sessions in Constitution Hall on the 100 level of the North Building of the Metro Toronto Convention Center. Presenters may locate their poster boards by checking the middle number of their poster number.

Poster numbers are Px-xx-xxxx. The first number after P, identifies the poster session you're assigned to. The 2nd two-digit number is the location of the poster in the hall. This number can be 1 through 34 and identifies exactly where you are in the hall. The final four-digit number is the unique poster/paper ID number.

Poster boards and pushpins will be provided. The poster board is 4 feet (height) x 8 feet (width) but you do not need to use the full space. The recommended size is 3.75 feet x 3.75 feet. Push pins will be provided for you to adhere the poster to the board. Presenters must remove their posters at the end of the poster session.

*\*Any posters not removed will be discarded by show management*



## POSTER SESSION TIMES

### THURSDAY, JULY 28TH

#### POSTER SESSION 1

*Education, language acquisition, and development*

10:20 – 12:00 EDT

#### POSTER SESSION 2

*Number, cause, emotion, space, and time*

13:00 – 14:40 EDT

#### POSTER SESSION 3

*Decision making, attention, planning, and search*

15:00 – 16:40 EDT

### FRIDAY, JULY 29TH

#### POSTER SESSION 4

*Social cognition, morality, and groups*

8:30 – 10:10 EDT

## POSTER SESSION 5

### *Language processing, representation, and use*

10:20 – 12:00 EDT

## SATURDAY JULY 30TH

## POSTER SESSION 6

### *Neuroscience, AI, and human-computer interaction*

8:30 – 10:10 EDT

## POSTER SESSION 7

### *Concepts, semantic representation, and memory*

13:00 – 14:40 EDT

## POSTER SESSION 8

### *Reasoning, learning, and representation*

15:00 – 16:40 EDT

## THANK YOU TO OUR SPONSORS AND EXHIBITORS

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Exhibit booths are located on Level 1 in the Constitution Hall and are available during the hours noted below:

**Thursday July 28, 2022** 10:00 AM to 4:40 PM

**Friday July 29, 2022** 8:30 AM to 4:00 PM

**Saturday July 30, 2022** 8:30 AM to 4:40 PM

## PLATINUM SPONSOR



### DUOLINGO Booth #5

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# CogSci AWARDS

## THE DAVID E. RUMELHART PRIZE

The David E. Rumelhart Prize is awarded annually to an individual or collaborative team making a significant contemporary contribution to the theoretical foundations of human cognition. Contributions may be formal in nature: mathematical modeling of human cognitive processes, formal analysis of language and other products of human cognitive activity, and computational analyses of human cognition using symbolic or non-symbolic frameworks all fall within the scope of the award.

The David E. Rumelhart Prize is funded by the Robert J. Glushko and Pamela Samuelson Foundation. Robert J. Glushko received a Ph.D. in Cognitive Psychology from the University of California, San Diego in 1979 under Rumelhart's supervision. He is an Adjunct Full Professor in the Cognitive Science Program at the University of California, Berkeley. The prize consists of a hand-crafted, custom bronze medal, a certificate, a citation of the awardee's contribution, and a monetary award of \$100,000.

## THE 2022 RUMELHART PRIZE HAS BEEN AWARDED TO



**Michael Tomasello**, *Department of Psychology and Neuroscience, Duke University & Max Planck Institute for Evolutionary Anthropology*

Michael Tomasello is James F. Bonk Distinguished Professor at Duke University. Michael is a fellow of the German National Academy of Sciences, the Hungarian National Academy of Sciences, the American Academy of Arts and Sciences, the National Academy of Science, and of course our own Cognitive Science Society. His numerous previous awards include the Jean Nicod Prize, the Mind and Brain Prize, the British Academy Wiley Prize in Psychology, and the Heineken Prize for Cognitive Science, among many others.

The guiding question behind the Michael Tomasello's research is one that many cognitive scientists have pondered at some time or other. That question, which Michael has pursued in a career spanning over 40 years and in two continents, is: What makes us human? What distinguishes us from our great ape cousins? For some, it is tool use, but many species use tools. For some, it is language, but many species have communicative systems. For some, it is the ability to craft our environment to our own ends. For Professor Tomasello, it is not a single cognitive domain, like language, or tool use. Humans are unique in multiple ways – in their communication, yes, but also in aspects of their

social cognition, their cultural learnings, their cooperative thinking, and their abilities to collaborate, to express prosocial behaviours, to follow social norms, and to maintain a moral identity.

## RUMELHART PRIZE PRESENTATION

### *'Shared Agency and Human Cognition'*

with **Michael Tomasello**

**Friday, July 29, 16:10 – 17:40**, Room 102,  
*the John W.H. Bassett Theatre at the Metro Toronto Convention Centre.*

**The Rumelhart Prize Reception** and Announcement of the 23rd Rumelhart Prize Recipient follow the Prize Presentation on Friday, July 29th at the SOHO Ballroom at the Delta Hotel at 18:00 – 19:00. The Rumelhart Reception is sponsored by the Robert J. Glushko and Pamela Samuelson Foundation."

## RUMELHART SYMPOSIUM

**Saturday, July 30, 8:30 – 10:10**, Room 102, *the John W.H. Bassett Theatre at the Metro Toronto Convention Centre*

In honor of Michael Tomasello, this year's Rumelhart Award recipient, research related to his work will be presented in this special symposium.

**Jan Engelmann**, *University of California Berkeley, Chair*

**Marjorie Rhodes**, *New York University*

**Tamar Kushnir**, *Duke University*

**Hyo Gweon**, *Stanford University*

## THE JEFFREY L. ELMAN PRIZE FOR SCIENTIFIC ACHIEVEMENT AND COMMUNITY BUILDING

In recognition of Jeffrey L. Elman's many contributions to the field of cognitive science, the Cognitive Science Society in partnership with the University of California, San Diego awards a prize at the Cognitive Science Society annual meeting to mid-career cognitive scientists (individuals or teams) whose careers exemplify the twin strands of scientific excellence and commitment to community-building and service that were so evident in his career. Jeffrey Elman made major contributions to the theoretical foundations of human cognition, most notably in the areas of language and development. His work continues to have an immense impact across fields as diverse as cognitive science, psycholinguistics, developmental psychology, evolutionary theory, computer science and linguistics. In addition to his important intellectual contributions, he also was an inspiring scientific citizen who is remembered for his generosity and mentorship.

## ELMAN SYMPOSIUM

Thursday, July 28, 2022, 13:00 – 14:40

Symposium chair: **Baudouin Forgeot d'Arc**, *CHU Sainte-Justine, University of Montreal*

*Presenters:*

**Valerie De Simone**, *FFDys*;

**Dominique Yvon**, *CEA Saclay - IRFU/DPHP*;

**Marie Lallier**, *Basque Center on Cognition, Brain and Language*

## THE 2022 ELMAN PRIZE HAS BEEN AWARDED TO



**Franck Ramus**, *Paris Sciences et Lettres University*

Franck Ramus received his PhD in Cognitive Science from EHESS (École des hautes études en sciences sociales), Paris in 1999, under the supervision of Jacques Mehler. He continued as a Marie Curie Fellow at the Institute of Cognitive Neuroscience, University College London, and then returned to Paris. Since 2002, he is a tenured CNRS researcher at the Department of Cognitive Studies, Ecole Normale Supérieure – PSL University, Paris.

## ROBERT J. GLUSHKO DISSERTATION PRIZES

The Cognitive Science Society and the Robert J. Glushko and Pamela Samuelson Foundation award up to five outstanding dissertation prizes in cognitive science each year. The goals of these prizes are to increase the prominence of cognitive science and encourage students to engage in interdisciplinary efforts to understand minds and intelligent systems. The hope is that the prizes will recognize and honor young researchers conducting ground-breaking research in cognitive science. The eventual goal is to aid in efforts to bridge between the areas of cognitive science and create theories of general interest to the multiple fields concerned with scientifically understanding the nature of minds and intelligent systems. Promoting a unified cognitive science is consistent with the belief that understanding how minds work will require the synthesis of many different empirical methods, formal tools, and analytic theories. 2011 was the inaugural year of this prize, and a new competition is held annually.

## GLUSHKO DISSERTATION PRIZE SYMPOSIUM

**Saturday, July 30th 15:00 – 16:40**, Room 102, the John W.H. Bassett Theatre at the Metro Toronto Convention Center.

Symposium chair: **David Danks**, University of California, San Diego

The Glushko Dissertation Prize Symposium showcases these 2022 award winners:

### 2022 WINNERS

**Kelsey Allen**, 2021 PhD thesis, from Massachusetts Institute of Technology  
*Learning to act with objects, relations and physics*

**Carolyn Baer**, 2020 PhD thesis, from University of British Columbia  
*Developing a sense of certainty*

**Judy Sein Kim**, 2020 PhD thesis, from Johns Hopkins University  
*'Visual' knowledge in the absence of visual experience*

**Sebastian Musslick**, 2021 PhD thesis, from Princeton University  
*On the rational bounds of cognitive control*

## MARR PRIZE

Sponsored by **The Cognitive Science Society**

The Marr Prize, named in honor of the late David Marr, will be given to the best student paper at the conference. The Marr Prize includes a cash award of \$1000 (USD). All student first authors are eligible for the Marr Prize for the best student paper. Authors who graduated within the last 6 months and are no longer students are also eligible if the work being reported was conducted entirely while the first author was a student.

### 2022 WINNER

**Kerem Oktar**, Princeton University  
*Mechanisms of Belief Persistence in the Face of Societal Disagreement*

## COMPUTATION MODELING PRIZES

Sponsored by **The Cognitive Science Society**

Four prizes will be awarded for the best full paper submissions that involve computational cognitive modeling. The four separate prizes will represent the best modeling work in the respective areas of: perception/action, language, higher-level cognition, and applied cognition. Each prize includes a cash award of \$1,000 (USD). The prizes are open to researchers at any level (student, post-doctoral fellow, research scientist, faculty) from any nationality. Any form of computational cognitive modeling relevant to cognitive science will



be eligible, including (but not limited to) neural networks, symbolic models, Bayesian models, dynamic systems, or various hybrids. If your full paper involves computational cognitive modeling, be sure to indicate its eligibility when you submit your paper.

## 2022 WINNERS

### APPLIED COGNITION

Eric Martinez, *MIT*

*So much for plain language: An analysis of the accessibility of United States federal laws (1951-2009)*

### HIGHER-LEVEL COGNITION

Federico Adolfi, *Ernst-Strüngmann Institute for Neuroscience in Cooperation with Max-Planck Society*

*Computational Complexity of Segmentation*

### LANGUAGE

Daniel Sabinasz, *Institut für Neuroinformatik*

*A Neural Dynamic Model Perceptually Grounds Nested Noun Phrases*

### PERCEPTION & ACTION

Anjie Cao, *Stanford University*

*Habituation reflects optimal exploration over noisy perceptual samples*

## SAYAN GUL AWARD

### In honor of Sayan Gul

Sayan Gul was an undergraduate at UC Berkeley studying cognitive science and computer science, and had great potential as a cognitive scientist. He died tragically while traveling to the Annual Conference of the Cognitive Science Society for the presentation of his research. This award is intended to support similarly outstanding undergraduates conducting research in cognitive science.

## 2022 WINNER

Neil Rathi, *Palo Alto High School*

*Explaining patterns of fusion in morphological paradigms using the memory-surprisal tradeoff*

## DIVERSITY & INCLUSION CONFERENCE AWARDS

Sponsored by **The Cognitive Science Society**

Up to ten prizes will be awarded to promote participation in the conference for graduate students who bring diversity to the society, in particular under-represented racial/ethnic groups and citizens of under-represented and economically disadvantaged countries who are presenting at the conference. Please note that under-represented countries are identified using the World Bank list of developing nations (Low Income, Low-Middle Income, or Upper-Middle Income). Countries considered High Income Economies are not eligible. Each conference award includes a cash award of \$1,000 (USD).

### 2022 WINNERS

**Mark Abdelshiheed**, North Carolina State University, USA

***The Power of Nudging: Exploring Three Interventions for Metacognitive Skills Instruction Across Intelligent Tutoring Systems***

**Can Avci**, Koç University, Turkey

***Gesture and Speech Disfluency in Narrative Context: Disfluency Rates in Spontaneous, Restricted, and Encouraged Gesture Conditions***

**Verónica D'Angelo**, Universidad Nacional de Córdoba, Argentina

***Defending Diversity: Providing Examples from Different Domains Enhances Application of System Principles Beyond the Domains Covered by the Examples***

**Joseph Outa**, Stanford University, USA

***Stop, children what's that sound? Multi-modal inference through mental simulation***

**Maureen Gill**, Yale University, USA

***What is a consumer product for? How teleology guides judgments of product liability***

**Lauren Girouard-Hallam**, University of Louisville, USA

***Children's Judgments About Asking for Past, Present, and Future Information from Google and a Person***

**Yeqiu Zheng**, Erasmus University Rotterdam & Tilburg University, the Netherlands

***The value of host-country language: The effect of Dutch language proficiency on immigrants' income, savings and financial wealth in the Netherlands***

**Aditi Jublie**, *Indian Institute of Technology Kanpur, India*  
*Attentional Bias for Self-Face: Investigation using Drift Diffusion Modelling*

**Hasan Qarehdaghi**, *Shahid Beheshti University, Iran*  
*An EZ-circular diffusion model of continuous decision processes*

**Shadab Tabatabaeian**, *University of California Merced, USA*  
*Mathematical insights as novel connections: Evidence from expert mathematicians*

## DIVERSITY & SOCIAL INEQUALITY AWARDS

Sponsored by **The Cognitive Science Society**

This prize recognizes the best work at our annual conference that tackles issues of diversity and social inequality. Eligible work can include studies of racism, sexism, and other forms of inequality, or more generally tackle the issue of psychological and behavioral diversity in cognitive science. The prize includes a cash award of \$1,000 (USD). The prize is open to researchers at any level (student, post-doctoral fellow, research scientist, faculty) from any nationality. It will be awarded to full papers that indicate their eligibility on submission.

### 2022 WINNER

**George Kachergis**, *Stanford University*

*Estimating demographic bias on tests of children's early vocabulary*

## DISCIPLINARY DIVERSITY & INTEGRATION AWARD IN COGNITIVE SCIENCE

Sponsored by **The Cognitive Science Society**

This conference prize recognizes the best cognitive science research in disciplines that have been traditionally under-represented at our annual conferences and journals. Eligible submissions include novel interdisciplinary perspectives and integrative approaches to understanding the human mind. The prize is open to researchers at any level (student to faculty) and will be awarded to full papers and/or organized symposia that indicate their eligibility on submission and upon review of the committee.

The prize for full papers will include a cash award of \$1,000 (USD). The prize for symposia includes complimentary member registration for the conference for both the organizer and each of those presenting in the symposium, and an additional cash award of \$1,000 (USD) for the organizer of the symposium if the symposium is turned into a successful proposal to topiCS.

## 2022 PAPER WINNER

Sehrang Joo, Yale University

*No privileged link between intentionality and causation: Generalizable effects of agency in language*

Steven Elmlinger, Cornell University

*Immature vocalizations simplify the speech of Tzeltal Mayan and US caregivers*

Federico Adolphi, Ernst-Strüngmann Institute for Neuroscience in Cooperation with Max-Planck Society

*Computational Complexity of Segmentation*

## 2022 SYMPOSIA WINNER

Dr. Sydney Levine, Massachusetts Institute of Technology

*Competing perspectives on building ethical AI: psychological, philosophical, and computational approaches*

## STUDENT TRAVEL GRANTS

Sponsored by the Robert J. Glushko and Pamela Samuelson Foundation

Up to \$10,000 (USD) will be awarded to undergraduate and graduate students for travel support to attend the Conference. Any student who is first author on a full-length paper to be presented at the conference is eligible. Awardees will be selected on the basis of need and submission quality, with an effort to achieve a broad representation among academic institutions. Student first authors can indicate whether they want to be considered for the grant as part of the submission process. After paper acceptance decisions have been made, selected first authors will be contacted by the Conference Awards Chairs.

## 2022 WINNERS

Kerem Oktar, Princeton University

*Mechanisms of Belief Persistence in the Face of Societal Disagreement*

Federico Adolphi, Ernst-Strüngmann Institute for Neuroscience in Cooperation with Max-Planck Society

*Computational Complexity of Segmentation*

Anjie Cao, Stanford University

*Habituation reflects optimal exploration over noisy perceptual samples*

Kevin O'Neill, Duke University

*Measuring and Modeling Confidence in Human Causal Judgment*

Katherine Collins, *Massachusetts Institute of Technology*  
***Structured, flexible, and robust: benchmarking and improving large language models towards more human-like behavior in out-of-distribution reasoning tasks***

Isabelle Boni, *University of Rochester*  
***Commutativity: Autonomously Inferred or Necessarily Culturally Supported?***

Maureen Gill, *Yale University*  
***What is a consumer product for? How teleology guides judgments of product liability***

Arthur Le Pargneux, *University of Warwick*  
***Contractualist Concerns Shape Moral Decisions and Moral Judgments***

Megan Waller, *Carnegie Mellon University*  
***Of mouses and mans: the role of production and feedback in language learning***

Daniel Sabinasz, *Institut für Neuroinformatik*  
***A Neural Dynamic Model Perceptually Grounds Nested Noun Phrases***

Tim Sainburg, *2021 PhD thesis, from University of California, San Diego*  
***Temporal organization in vocal communication: sequential structure, perceptual integration, and neural foundations***



## PROGRAM OVERVIEW SCHEDULE

All times below are Eastern Time (Toronto time), if you are attending virtually, please adapt to your own time zone. *Please note: the virtual platform will adjust the conference schedule in your specific time zone.*

JULY 27TH, 2022

### WORKSHOPS & TUTORIALS

#### TUTORIAL 1

08:30 – 16:30

Room 103,  
North Building

#### **Deep Learning for Brain Encoding and Decoding**

*Organizers and Presenters:* **Subba Reddy Oota**, IIIT Hyderabad; **Jashn Arora**, IIIT Hyderabad; **Manish Gupta**, IIIT Hyderabad; **Raju Bapi**, IIIT Hyderabad; **Mariya Toneva**, Carnegie Mellon University

How does the brain represent different modes of information? Can we design a system that can automatically understand what the user is thinking? We can make progress towards answering such questions by studying brain recordings from devices such as functional magnetic resonance imaging (fMRI). The brain encoding problem aims to automatically generate fMRI brain representations given a stimulus. The brain decoding problem is the inverse problem of reconstructing the stimuli given the fMRI brain representation. Both the brain encoding and decoding problems have been studied in detail in the past two decades and the foremost attraction of studying these solutions is that they serve as additional tools for basic research in cognitive science and cognitive neuroscience. Recently, inspired by the effectiveness of deep learning models for natural language processing and computer vision, such models have been applied for neuroscience as well. In this tutorial, we plan to discuss different kinds of stimulus representations, and popular encoding and decoding architectures in detail. The tutorial will provide a working knowledge of the state of the art methods for encoding and decoding, a thorough understanding of the literature, and a better understanding of the benefits and limitations of encoding/decoding with deep learning.

#### TUTORIAL 2

12:30 – 16:30

Room 104A,  
North Building

#### **Building Trust and Conducting Research With Minoritized Communities: A Spark-Sponsored Tutorial**

*Organizers and Presenters:* **Nichol Castro**, University of Buffalo; **Laurene Tumiel-Berhalter**, University of Buffalo; **Teresa Girolamo**, University of Connecticut; **Eliana Colunga**, University of Colorado, Boulder

The lack of diverse participants in our research can lead to issues of generalizability, inability to address social and health disparities, and perpetuation of stereotypes, among many other issues. For example, it became quite clear during COVID-19 in the United States, the inequities that existed in health care access and quality and disparities in health outcomes for minoritized communities. Such inequities and disparities are also found in research practice in many fields, including cognitive science. For example, research with Western, educated, industrialized, rich, and democratic (WEIRD) populations has been highlighted as problematic (Ceci, Kahan, & Braman, 2010; Henrich, Heine, & Norenzayan, 2010), yet the inclusion of diverse participants in research remains lacking.

## WORKSHOP 3

**08:30 – 16:30** *From Images to Symbols: Drawing as a Window Into the Mind*

Room 104B,  
North Building

*Organizers and Presenters: Kushin Mukherjee, University of Wisconsin-Madison; Holly Huey, University of California, San Diego; Timothy Rogers, University of Wisconsin-Madison; Judith Fan, University of California, San Diego*

Drawing is a powerful cognitive technology for creating external representations of thought. While drawings have long provided inspiration to researchers in many areas of cognitive science, including psychology, artificial intelligence, and neuroscience, these communities have not generally had opportunities to interact and share insights. The goal of this workshop is to bring together perspectives from multiple disciplines to explore the question of how humans use drawings to communicate knowledge, catalyzing new opportunities for multidisciplinary collaboration. We are introducing a novel “flipped” format wherein we will hold three virtual seminars in the weeks leading up to CogSci 2022, each highlighting insights from Machine Learning, Neuroscience, and Developmental Science, respectively. Holding these thematic seminars in advance will enable us to attract a broader audience for our event and focus on promoting informal interaction among workshop attendees at the on-site event.

## TUTORIAL 4

**08:30 – 16:30** *Category Theory for Cognitive Science*

Room 104C,  
North Building

*Organizers and Presenters: Britt Anderson, University of Waterloo; Steven Phillips, National Institute of Advanced Industrial Science and Technology; Toby St Clere Smithe, University of Oxford; Geoffrey Cruttwell, Mount Allison University*

Applied Category Theory (aCT) is both a language for describing and a method for analyzing the abstract structures that populate cognitive science. It can serve as the lingua franca for cross domain discussions, and as a mathematical tool for probing the consequences of a model or theory's structure. As many cognitive scientists are unfamiliar with aCT this workshop will provide an introduction to its terminology and key features. The morning session will emphasize key concepts and tutorial exercises. The afternoon session will use recent research applications as case studies of its potential and as the basis for demonstrations of how it can be used productively.

## WORKSHOP 5

**12:30 – 16:30** *Fostering Shared Intentionality for Diverse Learners Through Cross-Sensory Interaction Design*

Room 104D,  
North Building

*Organizers and Presenters: David Barter, OCAD University; Tamara Crasto, OCAD University; Erin Lee, OCAD University; Robert A Ingino, SenseTech Solutions; Peter Coppin, OCAD University*

As the theme of this year's conference suggests, cognitive diversity among learners and educators is increasingly acknowledged. However, in our societies that increasingly require advanced education, training, and technical skills, the pressure to standardize learning objectives, delivery techniques and delivery tools, especially online, is high. In these situations, learners and educators of diverse cognitive phenotypes and abilities experience learning environments that are a poor match for their abilities, making effective delivery of educational content challenging.

08:30 – 9:00 JULY 28TH, 2022

Room 102  
John W. H.  
Bassett Theatre**WELCOME FROM CSS CHAIR & ORGANIZERS**09:00–10:00 ***The Psychology of Cultural Dynamics***Room 102,  
John W. H.  
Bassett Theatre**Yoshihisa Kashima**, *Melbourne School of Psychological Sciences, The University of Melbourne*

Globalized humanity is changing and needs to change. Consider climate change and extremeweather events, geopolitical tensions and conflict, and rising inequalities within and between nations. To these contemporary adaptational challenges, human cognition and action are changing – both individually as a person and collectively as a species. These changes occur at times blindly, but all the while accompanied by human strivings to gain foresights and perspectives beyond the current horizon. Given the importance of culture as a mechanism for human adaptation, anthropology's answer has been cultural evolution – an attempt to understand and explain cumulative cultural changes over the millennia. Whereas this has provided us with the knowledge and insights into long-term macro-level cultural dynamics, micro-level

psychological knowledge complements our understanding of how and why macro-level cultural changes occur. Moreover, psychological insights are imperative in contemplating how to cultivate and craft human cultures – behaviour change, if you will – to navigate the uncharted waters into our collective futures. The psychology of cultural dynamics has accumulated knowledge and insights into micro-level cognitive and communicative processes that constitute and are constituted by macro-level cultural processes. In this presentation, I will examine the micro-macro dynamics of cultural maintenance and change mediated by dynamically changing social networks at the meso-level and outline future directions for the psychology of cultural dynamics.

10:00 – 10:20 **COFFEE BREAK**Room 105-107  
Constitution Hall10:00 – 11:15 **AFFINITY GROUP**

Virtual

(Virtual) ***Diverse Careers In Cognitive Science***10:20 – 12:00 **INVITED SYMPOSIUM - COGNITION ACROSS DIVERSE POPULATIONS**Room 102,  
John W. H.  
Bassett Theatre***Children's everyday language experiences across urban and rural contexts*****Marisa Casillas**, *University of Chicago****Human Diversity = Human Elasticity: Natural Languages of Speech and Sign*****Wendy Sandler**, *University of Haifa*

## *Understanding dynamic facial expression communication across cultures using data-driven methods*

Rachael Jack, *University of Glasgow*

## *The development of cooperation in a cross-cultural context*

Katherine McAuliffe, *Boston College*

### ORAL TALK SESSIONS

**10:20 – 12:00 T1 – VISION**

*Room 103*

**10:20 – 12:00 T2 – DECISION MAKING**

*Room 104A*

**10:20 – 12:00 T3 – SOCIAL COGNITION**

*Room 104B*

**10:20 – 12:00 T4 – LANGUAGE PRODUCTION**

*Room 104C*

**10:20 – 12:00 T5 – LANGUAGE EVOLUTION**

*Room 104D*

### VIRTUAL FLASH TALK SESSIONS

**10:20 – 11:05 FT1 - NUMERICAL COGNITION 1**

*Room 202D*

**10:20 – 11:05 FT2 - CONCEPTIONAL KNOWLEDGE**

*Room 202B*

**10:20 – 11:05 FT3 - EVENT COGNITION 1**

*Room 201D*

**10:20 – 11:05 FT4 - LANGUAGE REASONING 1**

*Room 201F*

**11:10 – 11:55 FT5 - HUMAN-COMPUTER INTERACTION 1**

*Room 202D*

**11:10 - 11:55 ET, FT6 - CONCEPTS AND CATEGORIES 1**

*Room 202B*

**11:10 - 11:55 ET, FT7 - CAUSATION**

*Room 201D*

**11:10 - 11:55 ET, FT8 - THEORY OF MIND 1**

*Room 201F*

### POSTER SESSION 1

**10:20 – 12:00 *Education, language acquisition, and development***

*Room 105-107,  
Constitution  
Hall*

**12:00 – 13:00 LUNCH, ON YOUR OWN**

**13:00 – 14:40 ELMAN SYMPOSIUM**

Room 102, the  
John W.H. Basset  
Theatre at the  
Metro Toronto  
Convention  
Centre

**2022 WINNER:** Franck Ramus, Paris Sciences et Lettres University

Symposium Chair: **Baudouin Forgeot d'Arc**, CHU Sainte-Justine, University of Montreal

Presenters:

**Valérie De Simone**, FFDys;

**Dominique Yvon**, CEA Saclay - IRFU/DPHP;

**Marie Lallier**, Basque Center on Cognition, Brain and Language

**ORAL TALK SESSIONS****13:00 – 14:40 T6 – CREATIVITY AND INSIGHT**

Room 103

**13:00 – 14:40 T7 – ANALOGY AND REASONING**

Room 104A

**13:00 – 14:40 T8 – PRAGMATICS 1**

Room 104B

**13:00 – 14:40 T9 – LANGUAGE PROCESSING**

Room 104C

**13:00 – 14:40 T10 – DEVELOPMENT 1**

Room 104D

**VIRTUAL FLASH TALK SESSIONS****13:00 – 13:45 FT9 – MORALITY**

Room 202B

**13:00 – 13:45 FT10 - METACOGNITION AND EXECUTIVE CONTROL**

Room 201D

**13:00 – 13:45 FT11 - EDUCATION 1**

Room 202D

**13:00 – 13:45 FT12 - COMMUNICATION 1**

Room 201F

**13:50 - 14:35 FT13 - SPATIAL COGNITION**

Room 202B

**13:50 - 14:35 FT14 - CONCEPTS AND CATEGORIES 2**

Room 201D

**13:50 - 14:35 FT15 - DECISION MAKING 1**

Room 202D

**13:50 - 14:35 FT16 - SOCIOLINGUISTICS 1**

Room 201F

## POSTER SESSION 2

**13:00 – 14:40** *Number, cause, emotion, space, and time*

Room 105-107,  
Constitution Hall

**14:40 – 15:00** **COFFEE BREAK**

Room 105-107  
Constitution Hall

## SYMPOSIUM 1 [ [details](#) ]

**15:00 – 16:40** *Distorted constellations: interdisciplinary perspectives on understanding reality and the self*

Room 102  
John W. H.  
Bassett Theatre

**Nwando Ebizie**, Atelier Nwando Ltd

**Simon J Cropper**, Melbourne School of Psychological Sciences

**Sophie Scott**, University College London

**Erinma Ochu**, Manchester Metropolitan University

## SYMPOSIUM 2 [ [details](#) ]

**15:00 – 16:40** *Diversity in Children's Temperament: Perspectives on Shyness in Interaction*

Room 103  
North Building

**Franziska Viertel**, Paderborn University

**Sarah Kucker**, Oklahoma State University

**Kristie Poole**, University of Waterloo

**Matt Hilton**, University of Potsdam

**Nils F. Tolksdorf**, Paderborn University

## ORAL TALK SESSIONS

**15:00 – 16:40** **T11 – CONCEPTS**

Room 104A

**15:00 – 16:40** **T12 – MEMORY AND LEARNING**

Room 104B

**15:00 – 16:40** **T13 – APPLIED LANGUAGE**

Room 104C

**15:00 – 16:40** **T14 – LANGUAGE ACQUISITION 1**

Room 104D

## VIRTUAL FLASH TALK SESSIONS

**15:00 - 15:45** **FT17 – MULTILINGUALISM 1**

Room 201F

**15:00 - 15:45** **FT18 - EVENT COGNITION 2**

Room 202D

**15:00 - 15:45** **FT19 - SEMANTICS 1**

Room 201D

**15:00 - 15:45** **FT20 – COOPERATION**

Room 202B



15:50 - 16:35 **FT21 - NUMERICAL COGNITION 2**

Room 201F

15:50 - 16:35 **FT22 - EMOTION 1**

Room 202D

15:50 - 16:35 **FT23 - LARGE LANGUAGE MODELS**

Room 201D

15:50 - 16:35 **FT24 - CREATIVITY**

Room 202B

### POSTER SESSION 3

15:00 - 16:40 **Decision making, attention, planning, and search**

Room 105-107

Constitution Hall

### 16:40 - 18:15 **AFFINITY GROUPS**

**Onsite** **Laschool and worldwide diverse cognitive science**

Room 101

Thursday, July 28th, 16:40 - 18:15

**Onsite** **Neural Nets for Cognition**

Room 104A

Thursday, July 28, 16:40 - 18:15

**Virtual or** **Non-traditional career paths for cognitive scientists**

**Onsite**

Room 103

Virtual, Monday, July 25, 09:00 - 10:00 OR Onsite, Thursday, July 28, 17:00 - 18:00

**Virtual** **Neurodiversity discussion group**

Thursday, July 28, 16:40 - 18:15

8:30 - 10:10 **JULY 29TH, 2022**

Room 102

John W.H.

Bassett Theatre

## **INVITED SYMPOSIUM - GLOBAL CHALLENGES FOR COGNITIVE SCIENCE**

### **Title tba**

Gabriela de Queiroz, *IBM*

### **The science of surviving (and thriving) in the apocalypse**

Athena Aktipis, *Arizona State University*

### **Technology, Democracy, and Cognition: Pressure Points and Global Challenges**

Stephan Lewandowsky, *University of Bristol*

### **Understanding and Reducing Online Misinformation Across 16 Countries on Six Continents**

David Rand, *Massachusetts Institute of Technology*

## ORAL TALK SESSIONS

- 8:30 – 10:10** **T15 – CAUSATION 1**  
Room 103
- 8:30 – 10:10** **T16 – REASONING**  
Room 104A
- 8:30 – 10:10** **T17 – EDUCATION**  
Room 104B
- 8:30 – 10:10** **T18 – LANGUAGE MODELING**  
Room 104C
- 8:30 – 10:10** **T19 – LANGUAGE ACQUISITION 2**  
Room 104D

## VIRTUAL FLASH TALK SESSIONS

- 8:30 – 9:15** **FT25 – THEORY OF MIND 2**  
Room 202D
- 8:30 – 9:15** **FT26 – LEARNING 1**  
Room 202B
- 8:30 – 9:15** **FT27 – EVENT COGNITION 3**  
Room 201D
- 8:30 – 9:15** **FT28 – MULTILINGUALISM 2**  
Room 201F
- 9:20 – 10:05** **FT29 – SOCIAL COGNITION 1**  
Room 202D
- 9:20 – 10:05** **FT30 – ARTIFICIAL INTELLIGENCE 1**  
Room 202B
- 9:20 – 10:05** **FT31 – EMBODIED COGNITION**  
Room 201D
- 9:20 – 10:05** **FT32 – READING 1**  
Room 201F

## POSTER SESSION 4

**8:30 – 10:10** ***Social cognition, morality, and groups***  
Room 105-107  
Constitution Hall

**10:10 – 10:20** **COFFEE BREAK**  
Room 105-107  
Constitution Hall

## SYMPOSIUM 3 [ *details* ]

**10:20 – 12:00** ***Dimensions of Diversity in Spatial Cognition: Culture, Context, Age, and Ability***  
Room 102  
John W. H. Bassett Theatre

**Tyler Marghetis**, University of California, Merced  
**Benjamin Pitt**, University of California, Berkeley  
**Holly Huey**, University of California, San Diego  
**Roberto Bottini**, Center for Mind/Brain Sciences (CIMEC), University of Trento

## SYMPOSIUM 4

10:20 – 12:00 **Race, Culture, and Language: A SPARK-Sponsored Symposium**

Room 103  
North Building

Jeni Kubota, *University of Delaware*

Ronda Lo, *York University*

Arturo Hernandez, *University of Houston*

Onur Özsoy, *Leibniz-Centre General Linguistics*

Natasha Tokowicz, *University of Pittsburgh*

Nichol Castro, *University of Buffalo*

## ORAL TALK SESSIONS

10:20 – 12:00 **T20 – EMOTION**

Room 104A

0:20 – 12:00 **T21 – HUMAN-COMPUTER INTERACTION**

Room 104B

10:20 – 12:00 **T22– COMPUTATIONAL NEUROSCIENCE 1**

Room 104C

10:20 – 12:00 **T23 – CULTURE AND COGNITION**

Room 104D

## VIRTUAL FLASH TALK SESSIONS

10:20 – 11:05 **FT33 – PERCEPTION 1**

Room 201D

10:20 – 11:05 **FT34 – ATTENTION**

Room 202D

10:20 – 11:05 **FT35 – MEMORY 1**

Room 202B

10:20 – 11:05 **FT36 – LANGUAGE ACQUISITION 1**

Room 201F

11:10 – 11:55 **FT37 – COGNITION OF TIME 1**

Room 201D

11:10 – 11:55 **FT38 – SOCIAL COGNITION 2**

Room 202D

11:10 – 11:55 **FT39 – PHONOLOGY**

Room 202B

11:10 – 11:55 ET, **FT40 – LANGUAGE ACQUISITION 2**

Room 201F

## POSTER SESSION 5

10:20 – 12:00 **Language processing, representation, and use**

Room 105-107  
Constitution Hall

12:00 – 13:00 **LUNCH, ON YOUR OWN**

**12:00 – 13:00 DUOLINGO SPONSOR SESSION**

Room 101

***Learning Science Jobs at Duolingo*****Bozena Pajak**, *VP of Learning and Curriculum*

First 100ppl receive boxed lunch

**13:00 – 14:00 *Resisting demhumanization in the age of AI***

Room 102

John W. H.

Bassett Theatre

**Emily M. Bender**, *University of Washington, Department of Linguistics*

The production and promotion of so-called “AI” technology involves dehumanization on many fronts: The computational metaphor valorizes one kind of cognitive activity as “intelligence”, devaluing many other aspects of human experience (Baria and Cross, 2021), while also focusing on agents as isolated individuals rather than seeing the importance of being located within webs of relationships (Birhane, 2021). AI research paradigms frequently frame the purpose of humans to be labelers of data or interchangeable machine components (Gray and Suri, 2019). Meanwhile, data collected from people is understood as “ground truth” even while it lies about those people, especially marginalized people (Noble, 2018; Raji, 2021). In this talk, I will explore these processes of dehumanization and the role that cognitive science can

play in resisting these trends by bringing a deeper and richer picture of human cognition to the discourse.

**14:00 – 14:20 COFFEE BREAK**

Room 105-107

Constitution Hall

**SYMPOSIUM 5 [ *details* ]****14:20 – 16:00 *Competing perspectives on building ethical AI: psychological, philosophical, and computational approaches***

Room 102

John W. H.

Bassett Theatre

**Sydney Levine**, *Harvard Psychology Department & MIT Department of Brain and Cognitive Sciences***Joshua August Skorburg**, *University of Guelph***Dan Hendrycks**, *UC Berkeley***Zhijing Jin**, *Max Planck Institute & ETH Zurich***Katherine Heller**, *Google Brain***SYMPOSIUM 6 [ *details* ]****14:20 – 16:00 *Innateness, Universals, Diversity***

Room 103

North Building

**Iris Berent**, *Northeastern University***Richard Samuels**, *The Ohio State University***Jennifer Culbertson**, *University of Edinburgh***Asifa Majid**, *Oxford University*

## ORAL TALK SESSIONS

- 14:20 – 16:00** **T24 – SPATIAL COGNITION**  
Room 104A
- 14:20 – 16:00** **T25 – LANGUAGE AND CONCEPT ACQUISITION**  
Room 104B
- 14:20 – 16:00** **T26 – REAL-WORLD DECISIONS**  
Room 104C
- 14:20 – 16:00** **T27 – COMMUNICATION**  
Room 104D
- 14:20 – 16:00** **T28 – EXPLORATION**  
Room 101

## VIRTUAL FLASH TALK SESSIONS

- 14:20 – 15:05** **FT41 – SEMANTICS 2**  
Room 202B
- 14:20 – 15:05** **FT42 – READING 2**  
Room 201F
- 14:20 – 15:05** **FT43 – LANGUAGE PROCESSING 2**  
Room 201D
- 14:20 – 15:05** **FT44 – CONCEPTS AND CATEGORIES 3**  
Room 202D
- 15:10 – 15:55** **FT45 – EXPLANATION 1**  
Room 202B
- 15:10 – 15:55** **FT46 – LEARNING 2**  
Room 201F
- 15:10 – 15:55** **FT47 – NEUROSCIENCE**  
Room 201D
- 15:10 – 15:55** **FT48 – MEMORY 2**  
Room 202D
- 16:00 – 16:10** **BREAK**

## RUMELHART PRIZE PRESENTATION

- 16:10 – 17:40** ***Shared Agency and Human Cognition***  
Room 102  
John W. H. Bassett Theatre
- Michael Tomasello**, Department of Psychology and Neuroscience, Duke University & Max Planck Institute for Evolutionary Anthropology

## RUMELHART RECEPTION

- 18:00 – 19:00** ***Celebrate the 23rd Rumelhart Winner Announcement with a champagne toast!***  
SOHO Ballroom,  
Delta Hotel,  
75 Lower Simcoe  
Street Toronto,  
Ontario

**08:30 – 10:10 JULY 30TH, 2022**

Room 102

John W. H.

Bassett Theatre

## RUMELHART SYMPOSIUM

Chair: **Jan Engelmann**, *University of California Berkeley*

Speakers:

**Jan Engelmann**, *University of California Berkeley*

**Marjorie Rhodes**, *New York University*

**Tamar Kushnir**, *Duke University*

**Hyo Gweon**, *Stanford University*

## SYMPOSIUM 7 [ [details](#) ]

**08:30 – 10:10**

Room 103

North Building

## *Universality and Diversity in Event Cognition and Language*

**Lilia Rissman**, *University of Wisconsin – Madison*

**Ercenur Ünal**, *Özyeğin University*

**Arrate Isasi-Isasmendi**, *University of Zurich*

**Yue Ji**, *Beijing Institute of Technology*

## ORAL TALK SESSIONS

**08:30 – 10:10**

Room 104A

## T29 – GROUPS AND COOPERATION

**08:30 – 10:10**

Room 104B

## T30 – DEVELOPMENT 2

**08:30 – 10:10**

Room 104C

## T31 – SEMANTICS

**08:30 – 10:10**

Room 104D

## T32 – SYNTAX AND MORPHOLOGY

## VIRTUAL FLASH TALK SESSIONS

**08:30 – 09:15**

Room 202D

## FT49 – LANGUAGE ACQUISITION 3

**08:30 – 09:15**

Room 202B

## FT50 – COMMUNICATION 2

**08:30 – 09:15**

Room 201D

## FT51 – EMOTION 2

**08:30 – 09:15**

Room 201F

## FT52 – CAUSATION AND EXPLANATION 2

**09:20 – 10:05**

Room 202D

## FT53 – SOCIOLINGUISTICS 2

**09:20 – 10:05**

Room 202B

## FT54 – DECISION MAKING 2

**09:20 – 10:05**

Room 201D

## FT55 – PERCEPTION 2

**09:20 – 10:05**

Room 201F

## FT56 – EDUCATION 2



## POSTER SESSION 6

**08:30 – 10:10** *Neuroscience, AI, and human-computer interaction*

Room 105-107  
Constitution Hall

**10:10 – 10:25** **COFFEE BREAK**

Room 105-107  
Constitution Hall

**10:25 – 11:25** *Whose minds matter? Theoretical and practical implications of representation in the Cognitive Sciences*

Room 102  
John W. H.  
Bassett Theatre

Neil Lewis Jr, Cornell University



Since the cognitive revolution, psychology and other cognitive sciences have shifted our research focus toward conducting primarily “basic” studies in laboratory and other nonnaturalistic settings with convenience samples that enable us to isolate mechanisms of interest. While this shift in research approach has expedited the rate of discovery in one sense, the shift away from studying naturally occurring behaviors in a variety of settings with diverse groups of people has created a tension—it has limited both what we have been able to learn and our ability to apply our findings to contemporary problems in the world. In this talk I will use examples from research on criminal justice, education, health, and environmental disparities to discuss the implications of our sampling strategies for the advancement of theories in the cognitive

sciences. I will then conclude by discussing the implications of our methodological practices for the application of our theories in the modern world.

**11:25 – 12:00** *CSS behind the scenes: Updates from the Society*

Chair, Kenny Smith

**12:00 – 13:00** **LUNCH ON YOUR OWN**

## INVITED SYMPOSIUM - DIVERSITY AND SOCIAL INTERACTION

**13:00 – 14:40** *Having the “right” emotions: The role of emotional acculturation in minority belonging*

Room 102, John  
W.H. Bassett  
Theatre

Batja Gomes de Mesquita, KU Leuven

*Crowdsourcing strategies to fact-check politicians are benefited from heterogeneous social influence*

Joaquin Navajas, Universidad Torcuato Di Tella

*Effect of interpersonal diversity on real-time coordination dynamics*

Ivana Konvalinka, Technical University of Denmark

*Elusive Inclusion: Towards AI Based Interventions to Promote Inclusivity in Digitally Mediated Team Environments*

Nia Dowell, University of California, Irvine

## ORAL TALK SESSIONS

- 13:00 – 14:40** **T33 – COMPUTATIONAL NEUROSCIENCE 2**  
Room 103
- 13:00 – 14:40** **T34– MORALITY**  
Room 104A
- 13:00 – 14:40** **T35 – EMBODIED COGNITION**  
Room 104B
- 13:00 – 14:40** **T36 – PRAGMATICS 2**  
Room 104C
- 13:00 – 14:40** **T37 – INFERENCE**  
Room 104D

## VIRTUAL FLASH TALK SESSIONS

- 13:00 – 13:45** **FT57 – ARTIFICIAL INTELLIGENCE 2**  
Room 201D
- 13:00 – 13:45** **FT58 – REASONING**  
Room 201F
- 13:00 – 13:45** **FT59 – EDUCATION 3**  
Room 202D
- 13:00 – 13:45** **FT60 – COMMUNICATION 3**  
Room 202B
- 13:50 – 14:35** **FT61 – DECISION MAKING 3**  
Room 201D
- 13:50 – 14:35** **FT62 – ANALOGY**  
Room 201F
- 13:50 – 14:35** **FT63 – SYNTAX AND MORPHOLOGY**  
Room 202D
- 13:50 – 14:35** **FT64 – COORDINATION**  
Room 202B

## POSTER SESSION 7

**13:00 – 14:40** ***Concepts, semantic representation, and memory***  
Room 105-107  
Constitution Hall

**14:40 – 15:00** **COFFEE BREAK**  
Room 105-107  
Constitution Hall

**15:00 – 16:40** **GLUSHKO TALKS [ *details* ]**  
Room 102  
John W.H. Bassett Theatre

**Kelsey Allen, MIT**

**Carolyn Baer, UBC**

**Judy Sein Kim, Johns Hopkins University**

**Sebastian Musslick, Princeton University**

**Timothy Sainburg, University of California San Diego**

SYMPOSIUM 8 [ [details](#) ]

15:00 – 16:40 **Bilingual Sentence Processing: when Models Meet Experiments**

Room 103

North Building

Xavier Hinaut, *Bordeaux University*

Stefan L. Frank, *Radboud University*

Edith Kaan, *University of Florida*

Yung Han Khoe, *Radboud University*

Lin Chen, *University of Pittsburgh*

Irene Winther, *University of Edinburgh*

Yevgen Matusevych, *University of Edinburgh*

## ORAL TALK SESSIONS

15:00 – 16:40 **T38 – NETWORKS AND GROUPS**

Room 104A

15:00 – 16:40 **T39 – LANGUAGE ACQUISITION 3**

Room 104B

15:00 – 16:40 **T40 – MEMORY**

Room 104C

15:00 – 16:40 **T41 – CAUSATION 2**

Room 104D

## VIRTUAL FLASH TALK SESSIONS

15:00 – 15:45 **FT65 – PRAGMATICS**

Room 202D

15:00 – 15:45 **FT66 – MUSIC AND ART**

Room 201F

15:00 – 15:45 **FT67 – LEARNING 3**

Room 201D

15:50 – 16:35 **FT68 – EMOTION 3**

Room 202B

15:50 – 16:35 **FT69 – CULTURE AND COGNITION**

Room 202D

15:50 – 16:35 **FT70 – COGNITION OF TIME 2**

Room 201F

15:50 – 16:35 **FT71 – HUMAN-COMPUTER INTERACTION 2**

Room 201D

15:50 – 16:35 **FT72 – SOCIAL COGNITION 3**

Room 202B

## POSTER SESSION 8

15:00 – 16:40 **Reasoning, learning, and representation**

Room 105-107

Constitution Hall

16:40 – 17:00 **BREAK**

17:00 – 17:20 **CLOSING SESSION & THANK YOU**  
 Room 102  
 John W. H.  
 Bassett Theatre



## The British Journal for the Philosophy of Science

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## INVITED SYMPOSIUM – COGNITION ACROSS DIVERSE POPULATIONS

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**THURSDAY, JULY 28TH**

10:20 – 12:00 ET IN ROOM 102, JOHN W.H. BASSETT THEATRE

### *Children's everyday language experiences across urban and rural contexts*

**Marisa Casillas**, *University of Chicago*

In the first few years of life, much of what children learn about language they learn at home. Steeped in quotidian talk, children at home are folded into the program of everyday routines and are close witnesses to the interactions and activities taking place around them. Who addresses them, when, and why shapes children's linguistic debut onto this daily landscape of activity. By investigating how children's language environments are structured by their daily lives, we can better understand both the material and the aims by which children build their language knowledge. In this talk I will review recent work analyzing young children's linguistic and object-centric activities over the course of whole waking days at home in a set of urban and rural communities. While the findings I present will only give a initial glimpse into children's home language use, they suggest where we can expect to find robust cross-cultural similarities—as well as robust differences—in children's early language experiences. I discuss how we might usefully engage with both similarities and differences in refining our theories of language learning, which are otherwise primarily focused on research from a handful of populations and language features.

### *Human Diversity = Human Elasticity: Natural Languages of Speech and Sign*

**Wendy Sandler**, *University of Haifa*

Traditional historical and comparative linguistics emphasized differences across spoken languages and language families. Chomskyan generative linguistics caused a paradigm shift by emphasizing universal properties, thought to be innate. In the absence of auditory input, humans inevitably create an alternative sign language system, a system exhibiting impressive formal universals that are similar to those of spoken languages. But is that the whole story? I will demonstrate certain fundamental, predictable, and nontrivial differences between natural spoken and signed languages, differences that are just as sweeping as the similarities. This diversity in humans provides hard evidence for cognitive elasticity in a complex system, setting us apart from other species. However, I will show that the body is responsible for certain fundamental and predictable differences between natural

spoken and signed languages. In addition, careful attention to bodily articulations in young sign languages gives cues to the emergence of linguistic complexity in diverse socio-cultural environments. Two consequences follow from these discoveries. First, the role of the body in structuring aspects of the cognitive system of language provides a primary investigative tool. Second, we humans are endowed with the capacity to create two distinguishable types of natural language. Identifying both the similarities and the differences between them will shed light on this quintessential and unique type of cognitive diversity in our species.

### ***Understanding dynamic facial expression communication across cultures using data-driven methods***

**Rachael Jack**, *University of Glasgow*

Understanding how humans use facial expressions to communicate social messages has remained a central question for over a century. However, this is empirically challenging due to their complexity, and the use of traditional, theory-driven approaches and Western-centric biases that have restricted understanding. New data-driven methods and advances in information-theoretic analysis tools now alleviate these constraints, giving real traction and delivering novel insights. Here, I will showcase one such approach that can objectively and precisely model dynamic facial expressions within and across cultures and characterize the specific social information they transmit. We show that four, not six, core expressive patterns are cross-cultural, that facial expressions transmit distinct social information over time in an evolving, broad-to-specific hierarchical structure, and can multiplex complex information. Our work challenges longstanding beliefs of cultural universality and forms the basis of a new theoretical framework. Finally, we show direct transference of our dynamic facial expression models to the digital economy including generative signalling models for digital agents.

### ***The development of cooperation in a cross-cultural context***

**Katherine McAuliffe**, *BOSTON COLLEGE*

Cooperation is ubiquitous across human populations. Yet, the norms that govern cooperative behavior—for instance, what counts as a ‘fair’ offer and how and when transgressions should be punished—show striking cross-societal variation. An important goal for the social sciences is to better understand the mechanisms that support human cooperation and to leverage these insights to help foster cooperative relations from individual to global levels. To this end, developmental data can offer important insight into questions about the origins of cross-societal variation, shedding light on when in development different cooperative behaviors emerge and what kinds of inputs shape their emergence and expression. In this presentation, I will review three lines of work that explore cross-societal variation in the development



of different aspects of children's cooperation. The first explores how a signature of the human sense of fairness—inequity aversion, the aversion to unequal outcomes—emerges across societies. The second builds on this first line of work exploring when and where children are willing to incur personal costs to punish unfairness in others. The third widens the lens of focus to look beyond fairness, exploring how other key cooperative behaviors—honesty, trustworthiness and forgiveness—emerge across societies. In this part of the presentation, I will touch on recent work exploring the mechanisms of cooperative norm transmission, asking whether children are differentially sensitive to normative information from adults versus peers. Together, these studies contribute to our understanding of the origins of cooperation in children across different populations and, in doing so, showcase the importance of exploring children's emerging cooperative behavior in a cross-cultural context.

## INVITED SYMPOSIUM – GLOBAL CHALLENGES FOR COGNITIVE SCIENCE

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**FRIDAY, JULY 29TH**

8:30 – 10:10 ET IN ROOM 102, JOHN W.H. BASSETT THEATRE

*Title tba*

**Gabriela de Queiroz, IBM**

Coming

*The science of surviving (and thriving) in the apocalypse*

**Athena Aktipis, Arizona State University**

Humans have had to grapple with challenges including infectious diseases, famines, environmental changes, wars, and other sources of catastrophic risk throughout our evolutionary history as a species. What cognitive capacities and decision rules did our ancestors use to survive these difficulties? And what can we learn from small-scale societies about how to manage risk more effectively so that we can survive (and thrive) as we face an increasingly apocalyptic world? In this talk, I'll explain how the four risk management strategies (risk retention, risk avoidance, risk reduction and risk transfer) can increase the resilience of individuals, communities and society at large. Drawing on a combination of anthropological fieldwork, agent-based computational models, and decision-making experiments with human participants, I will argue that we humans are indeed 'adapted for the apocalypse,' especially when it comes to the decision rules that we use to manage risk and help others in times of need. Scaling up these abilities to deal with the massive, wicked, and multidimensional problems of today will require creative solutions, broad interdisciplinary cooperation, and an

appreciation of the fundamental interdependence that underlies all life on this planet.

### ***Technology, Democracy, and Cognition: Pressure Points and Global Challenges***

**Stephan Lewandowsky**, *University of Bristol*

Democracy is in retreat worldwide. Even formerly stable democracies such as the U.S. and U.K. have witnessed events and actions by leaders that are incompatible with democratic norms. The reasons for these trends are complex and difficult to disentangle, but commentators and researchers almost invariably invoke the spread of misinformation and social media as possible contributing factors to the erosion of democracy. I survey the pressure points between human cognition and the current architecture of social media and how these pressure points almost inevitably contribute to an erosion of democracy. In particular, I focus on the “attention economy”, algorithmic curation of content, and manipulative choice architectures, and how they facilitate behaviors and attitudes that are endangering the common knowledge base that is essential for democratic functioning. I then review potential technological and cognitive solutions to these problems.

### ***Understanding and Reducing Online Misinformation Across 16 Countries on Six Continents***

**David Rand**, *Massachusetts Institute of Technology*

The spread of misinformation online is a global problem that requires global solutions. To that end, we conducted an experiment in 16 countries across 6 continents (N = 33,480) to investigate predictors of susceptibility to misinformation and interventions to combat misinformation. In every country, participants with a more analytic cognitive style and stronger accuracy-related motivations were better at discerning truth from falsehood; valuing democracy was also associated with greater truth discernment whereas political conservatism was negatively associated with truth discernment in most countries. Subtly prompting people to think about accuracy was broadly effective at improving the veracity of news that people were willing to share, as were minimal digital literacy tips. Finally, crowdsourced accuracy evaluation was able to differentiate true from false headlines with high accuracy in all countries. The consistent patterns we observe suggest that the psychological factors underlying the misinformation challenge are similar across the globe, and that similar solutions may be broadly effective. For pre-print PDF see [psyarxiv.com/a9frz](https://psyarxiv.com/a9frz). For summary tweet thread see: [twitter.com/DG\\_Rand/status/1493946312353619981?s=20](https://twitter.com/DG_Rand/status/1493946312353619981?s=20)

## INVITED SYMPOSIUM – DIVERSITY AND SOCIAL INTERACTION

**SATURDAY, JULY 30TH**

13:00 – 14:40 ET IN ROOM 102, JOHN W.H. BASSETT THEATRE

### *Having the “right” emotions: The role of emotional acculturation in minority belonging*

**Batja Gomes de Mesquita, KU Leuven**

People learn to have emotions that fit the values central to their groups or cultures, and that benefit the types of relationships that are valued there. By sharing similar emotions, individuals align themselves –often unwittingly-- with these central values. Therefore, cultural variations in emotional phenomena can be understood from culturally normative relationship goals that tell individuals how to feel, when to feel and why to feel. Considered this way, having the “right” emotions is a key social competence in achieving belongingness and fit. In this talk I present cross-sectional, longitudinal and social network research on emotional acculturation, and its consequences for the belongingness and fit of immigrant minorities. I will also discuss how our insights on emotional acculturation may inform interventions to improve the belongingness of immigrant minorities.

### *Crowdsourcing strategies to fact-check politicians are benefited from heterogeneous social influence*

**Joaquin Navajas, Universidad Torcuato Di Tella**

The spread of misinformation has substantially sped up in recent years, posing tangible risks to public health, democratic life, and the fight against climate change. For this reason, finding novel solutions to scale and reduce the time-intensive work of fact-checking agencies has become an urgent issue in social science. In this work, we evaluated crowd sourcing as a strategy to fact-check statements made by politicians, a type of misinformation that has been understudied in comparison to fake news. We performed a behavioural experiment (N=180) where the structure of social influence was manipulated, with the objective of identifying which communication network designs enhanced or undermined detection of 20 statements made by political leaders from a left-wing and a right-wing political party in Argentina. We found that crowds of laypeople are generally able to classify political discourse in a similar way as a fact-checking agency, but they are subject to partisan biases at the individual level. We also observed that social influence in heterogeneous dyadic interactions works as an antidote to these biases. Altogether, our results support recent efforts on developing crowdsourcing tools for aiding fact-checking over a

variety of misinformation formats, adding a precautionary note on how partisanship may limit its performance, at least in the context of fact-checking politicians.

### ***Effect of interpersonal diversity on real-time coordination dynamics***

**Ivana Konvalinka**, *Technical University of Denmark*

Social cognition research has so far mostly been focused on individuals isolated from social interaction, or generalized mechanisms of joint action to the average individuals, with a lack of studies investigating how similarity or diversity across dyads (or groups) modulate the interactions between them. It thus remains largely unknown how interpersonal differences along various domains influence real-time interaction dynamics. In this talk, I will first discuss how emergence of leader-follower coordination dynamics is modulated by interpersonal differences in expertise and task demands. Furthermore, I will present a preliminary study that probes into how interpersonal diversity in social network properties between dyads, extracted from longer-term social interactions, modulates their coordination dynamics in a real-time joint action task. The results suggest that the more similar participants are to each other in terms of their social network properties (e.g. how connected they are to others in the network), the more equally they contribute to the task and the more equally they adapt to each other; however, as the relative diversity between them increases, the more connected individual adapts more and contributes more toward the joint goal. The participants thus seem to embody, in real-time, their relative interpersonal differences in social network properties. Finally, I will discuss how this experimental framework can be used to probe into the effect of group diversity on emergent group coordination dynamics.

### ***Elusive Inclusion: Towards AI Based Interventions to Promote Inclusivity in Digitally Mediated Team Environments***

**Nia Dowell**, *University of California, Irvine*

In the current globalized world, innovation in science and technology are vital for economic competitiveness, quality of life, and national security. This trend is accelerating the increasing reliance on virtual teams and their collaborative effort to solve complex environmental, social and public health problems. To contend with these dynamic conditions, communication, and collaborative problem-solving (CPS) competencies have taken a principal role in educational policy, research, and technology. Adaptive educational technologies provide a platform to deliver personalized training to improve learners' CPS skills. However, for these systems to optimally tailor instruction, they must have key insights into learners' interaction dynamics and team behaviors. We have been exploring these properties by employing Group Communication Analysis (GCA), a computational linguistics

methodology for quantifying and characterizing the socio-cognitive processes between learners in online interactions. This talk will focus on recent studies where we have used GCA to gain a deeper understanding of role ecologies, learning and problem-solving, and issues of inclusivity in digitally mediated group interactions. The scalability of GCA opens the door for future research efforts directed towards improving collaborative competencies and creating more inclusive online interactions.

## SYMPOSIA

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### SYMPOSIUM 1

#### *Distorted constellations: interdisciplinary perspectives on understanding reality and the self*

**THURSDAY, JULY 28TH 15:00 - 16:40 ET**

ROOM 102 - JOHN W. H. BASSETT THEATRE

*Speakers: Nwando Ebizie, Atelier Nwando Ltd; Simon J Cropper, Melbourne School of Psychological Sciences; Sophie Scott, University College London; Erinma Ochu, Manchester Metropolitan University, Chair*

Visual Snow is a neurological condition that causes a person to experience an 'augmented' reality of auras, glowing lines, depression, anxiety and depersonalisation (Solly et al. 2021). Whilst Visual Snow produces a collection of different symptoms, it is a clinically recognised disorder (Puleda et al. 2020). A commonly experienced visual symptom is described as the 'persistent effect of television "snow"', and was first described in the literature in 1995 (Liu et al. 1995).

Distorted Constellations is an immersive sensory, labyrinthine environment and playful experience of an augmented reality interpretation of the artist's unique perception of the world. The exhibit draws on the rare neurological syndrome Visual Snow experienced by the artist and informed by disciplinary perspectives from neurology, cognitive neuroscience and psychological science. The exhibition, public events and recent inbuilt psychological study, embrace the subjective nature of perception whilst highlighting a role for augmented reality art experiences as cognitive science experiments.

## SYMPOSIUM 2

*Diversity in Children's Temperament: Perspectives on Shyness in Interaction*

THURSDAY, JULY 28TH

15:00 - 16:40 ET Room 103 - North Building

*Speakers:* **Franziska Viertel**, Paderborn University; **Sarah Kucker**, Oklahoma State University; **Kristie Poole**, University of Waterloo; **Matt Hilton**, University of Potsdam; **Nils F. Tolksdorf**, Paderborn University, Chair

One key dimension of individual differences that affects children's development, interactional behavior, and cognitive processes is temperamental shyness—a tendency to be reluctant or anxious in the face of new social situations. Prior research has documented shyness holds the potential to negatively impact a child's social functioning, psychological health, and language abilities. However, emerging research from different disciplinary angles sheds a more positive light on shyness by illustrating adaptive aspects such as benefits in social cognitive and communicative functioning (Viertel, 2019). Furthermore, there is accumulating evidence that shyness may not necessarily have a detrimental effect on language learning, especially when knowledge is assessed under familiar conditions (Kucker et al., 2021; Tolksdorf et al., 2021). However, although considered a ubiquitous phenomenon, the relation between shyness and other cognitive, perceptual, and social processes in childhood remains far from understood. Thus, by drawing together multiple levels of analyses and perspectives, the aim of this symposium is to emphasize the diverse manifestations of shyness in interactional settings and its impact on empathy, language, and social interactions.

## SYMPOSIUM 3

*Dimensions of Diversity in Spatial Cognition: Culture, Context, Age, and Ability*

FRIDAY, JULY 29TH

10:20 - 12:00 ET ROOM 102 - JOHN W. H. BASSETT THEATRE

*Speakers:* **Tyler Marghetis**, University of California, Merced; **Benjamin Pitt**, University of California, Berkeley, Chair; **Holly Huey**, University of California, San Diego; **Roberto Bottini**, Center for Mind/Brain Sciences (CIMEC), University of Trento

Throughout the lifespan and across cultures, all human behavior happens in space. By early childhood, people are capable of navigating complex 3D environments, executing sophisticated motor plans, and coordinating action with others. They also use their representations of space to structure a variety of non-spatial concepts, including time,



number, similarity, and emotion. How do people perform these cognitive feats? One source of insight comes from studying the diversity of spatial cognition: Although the physical properties of space are invariant, the way people typically conceptualize space varies radically across groups, between individuals, and over development. By studying this variation in spatial cognition, we can better understand the universal set of cognitive and neural mechanisms that underlie it, with implications for the cognitive sciences, education, and design.

In that spirit, this symposium brings together researchers who work in disparate subfields (i.e. neuroscience, complexity science, cognitive psychology, developmental psychology) to discuss four different dimensions of diversity in spatial cognition, as it varies across cultures, contexts, ages, and abilities. [Paper1] focuses on cross-cultural diversity at a global scale. Taking a systems-level approach, this work leverages decades of published field work across dozens of cultures to clarify patterns and predictors of spatial cognition, and to identify blind spots and biases in the kinds of cultures that have been sampled. [Paper2] zooms in on a single culture — the Tsimane’ of Bolivia. By studying how spatial concepts (and spatial language) vary at the level of the individual, this work seeks to clarify the principles that govern such variation, at any level. [Paper3] focuses on changes in spatial cognition over development. By comparing the geometrical intuitions of children and adults (within and across cultures), this work helps to clarify the universal and cultural origins of our visuospatial knowledge. Finally, [Paper4] investigates how blindness alters neural representations of space. Using fMRI techniques in congenitally-blind adults, this work clarifies the role of vision in cognitive maps, the foundation of spatial navigation. Together, these talks offer a multi-dimensional view of spatial cognitive diversity, and motivate interdisciplinary approaches to the study of the mind.

## SYMPOSIUM 4

### *Race, Culture, and Language: A SPARK-Sponsored Symposium*

**FRIDAY, JULY 29TH**

10:20 - 12:00 ET ROOM 103 - NORTH BUILDING

**Speakers:** **Jeni Kubota**, University of Delaware; **Ronda Lo**, York University; **Arturo Hernandez**, University of Houston; **Onur Özsoy**, Leibniz-Centre General Linguistics; **Natasha Tokowicz**, University of Pittsburgh, Chair; **Nichol Castro**, University of Buffalo, Chair

In the first half of the symposium, there will be two speakers discussing the perception of race and culture, and its impact on the cognitive processes of bias and attention. In the second half of the symposium, there will be two speakers discussing linguistic diversity through the lens of heritage speakers and word etymology.

## SYMPOSIUM 5

*Competing perspectives on building ethical AI: psychological, philosophical, and computational approaches*

FRIDAY, JULY 29TH

14:20 - 16:00 ET ROOM 102 - JOHN W. H. BASSETT THEATRE

*Speakers: **Sydney Levine**, Harvard Psychology Department & MIT Department of Brain and Cognitive Sciences, Chair; **Joshua August Skorborg**, University of Guelph; **Dan Hendrycks**, UC Berkeley; **Zhijing Jin**, Max Planck Institute & ETH Zurich; **Katherine Heller**, Google Brain, Discussant*

AI systems that dynamically navigate the human world will sometimes need to predict and produce human-like moral judgments. This task requires integrating complex information about human moral cognition (what decision would humans make in this situation?), normative ethics (what is the right decision for an AI to make?), and artificial intelligence engineering (how can we implement this functionality in AI systems?). A range of solutions have begun to emerge within the cognitive science community to satisfy these three categories of demands. However, most solutions tend to satisfy some demands, while falling short on others. This symposium highlights four competing solutions for building AI with a human-like moral sense -- with the goal of highlighting the strengths and weaknesses of each approach and how each might complement the others in development and deployment going forward.

## SYMPOSIUM 6

*Innateness, Universals, Diversity*

FRIDAY, JULY 29TH

14:20 - 16:00 ET ROOM 103 - NORTH BUILDING

*Speakers: **Iris Berent**, Northeastern University, Chair; **Richard Samuels**, The Ohio State University; **Jennifer Culbertson**, University of Edinburgh; **Asifa Majid**, Oxford University*

What is human nature like: is the mind equipped with innate principles of core knowledge? If so, how can we account for the well-recognized diversity in human cognition? And how can we, cognitive scientists, “get” human nature better—minimizing the pitfalls of our intuitive cognitive biases and our narrow WEIRD perspective?

This symposium seeks to address the question of human nature from a broad interdisciplinary perspective. We begin by examining the notion of “human nature” and the concept of innateness (Samuels) and exploring some of the challenges facing its discovery by the confinements of our own human cognition (Berent). The next talk (Culbertson) explores the tensions between cognitive universals and

diversity in the domain of language and demonstrates the merits of a cross-linguistic perspective. The last talk (Majid) considers how culture and nurture can shed light on human nature by examining the linguistic expression of perceptual categories across cultures.

## SYMPOSIUM 7

### *Universality and Diversity in Event Cognition and Language*

**SATURDAY, JULY 30TH**

8:30 - 10:10 ET ROOM 103 - NORTH BUILDING

*Speakers: Lilia Rissman, University of Wisconsin – Madison; Ercenur Ünal, Özyeğin University; Arrate Isasi-Isasmendi, University of Zurich; Yue Ji, Beijing Institute of Technology, Chair*

Humans are surprisingly adept at interpreting what is happening around them – they spontaneously and rapidly segment and organize their dynamic experience into coherent event construals. Such event construals may offer a starting point for assembling a linguistic description of the event during speaking (Levelt, 1989). However, the precise format of event representations and their mapping to language have remained elusive, partly because research on how people mentally segment and perceive events (see Radvansky & Zacks, 2014 for a review) has largely proceeded separately from analyses of how events are encoded in language (see Truswell, 2019 for a review).

## SYMPOSIUM 8

### *Bilingual Sentence Processing: when Models Meet Experiments*

**SATURDAY, JULY 30TH**

15:00 - 16:40 ET ROOM 103 - NORTH BUILDING

*Speakers: Xavier Hinaut, Bordeaux University, Stefan L. Frank, Radboud University, Chair; Edith Kaan, University of Florida; Yung Han Khoe, Radboud University; Lin Chen, University of Pittsburgh; Irene Winther, University of Edinburgh; Yevgen Matusevych, University of Edinburgh*

Although sentence comprehension and production are increasingly often studied by combining computational modeling and human experiments, this approach remains mostly restricted to studies of monolingual or first-language(L1) processing. There are currently only very few sentence-level computational models of second-language(L2) or bilingual processing (Frank, 2021). This lack of computational specifications can hamper further progress in bilingualism research. Moreover, better understanding of bilingual processing will give more insights into more general mechanisms such as cognitive control processes involved while switching languages (Luk et al., 2012). Our symposium aims to bring together researchers from different labs and

with different research traditions, working on the intersection of models and experiments in bilingual sentence processing. The symposium has four talks, by Edith Kaan (associate professor, specializing in psycholinguistics of bilingualism), Yung Han Khoe (PhD student, working on models of bilingual sentence production), Lin Chen (research associate with an expertise in reading processes), and a joint talk by Irene Winther and Yevgen Matuskevych (PhD student and research associate, respectively, in computational cognitive science of language). Finally, we will have a panel discussion to suggest how models could be challenged by experimental data, and provide new explanatory mechanisms. This discussion will be moderated by Xavier Hinaut (research scientist in computational neuroscience) and Stefan Frank (associate professor in computational psycholinguistics).

## SPONSOR SESSION SUMMARY

### *Learning Science Jobs at Duolingo*

**FRIDAY, JULY 29TH**

12:00 - 13:00 ROOM 101

**Bozena Pajak**, *VP of Learning and Curriculum*

Duolingo is the most popular language-learning application in the world, with over 500 million users and over half a billion exercises completed daily. We are passionate about providing free education to the world, making data-driven and science-based decisions, and finding innovative solutions to complex problems. We offer meaningful work, limitless learning opportunities, and close collaboration with brilliant minds across different roles and backgrounds. Come to this session to learn more about our jobs for people with research training in learning sciences and language learning. At Duolingo, you will have an opportunity to apply your skills and knowledge in a fast-paced, collaborative environment, where you see the immediate impact of your work on millions of learners worldwide. You can also check out our job postings here: [careers.duolingo.com](https://careers.duolingo.com)

## ORAL TALK SESSIONS

### T1.1 Information sampling explains Bayesian learners' biases in correlation judgment

Presenting Author: **Lisheng He**

**Xiumei Zhang**: Shanghai International Studies University;  
**Lisheng He**: Shanghai University; **Sudeep Bhatia**: University of Pennsylvania

### T1.2 Use of clustering in human solutions of the traveling salesperson problem

Presenting Author: **Vijay Marupudi**

**Vijay Marupudi**: Georgia Tech; **Rina Harsch**: University of Minnesota; **V. N. Vimal Rao**: University of Minnesota-Twin Cities; **Jimin Park**: University of Minnesota; **Jeffrey K. Bye**: University of Minnesota; **Sashank Varma**: Georgia Tech

### T1.3 Climbing the Tree: Structured Hierarchical Representations in Visuomotor Maps

Presenting Author: **Juliana E. Trach**

**Juliana E. Trach**: Yale University; **Samuel David McDougle**: Yale University

### T1.4 Three-Dimensional Object Completion in Humans and Computational Models

Presenting Author: **Eunice Yiu**

**Eunice Yiu**: UC Berkeley; **Jasmine Collins**: UC Berkeley; **Alison Gopnik**: University of California at Berkeley

### T1.5 Towards a Model of Visual Reasoning

Presenting Author: **Ekaterina Y. Shurkova**

**Ekaterina Y. Shurkova**: University of Edinburgh; **Leonidas A. A. Douras**: University of Edinburgh

### T2.1 An EZ-circular diffusion model of continuous decision processes

Presenting Author: **Hasan Qarehdaghi**

**Hasan Qarehdaghi**: Shahid Beheshti University; **Jamal Amani Rad**: Shahid Beheshti University

### T2.2 Affective Factors Affect Visuospatial Decision-making: A Drift Diffusion Modeling Approach

Presenting Author: **Yaxin Liu**

**Yaxin Liu**: Emory University; **Stella Lourenco**: Emory

### T2.3 Empirical and Computational Evidence for Reconfiguration Costs During Within-Task Adjustments in Cognitive Control

Presenting Author: **Dr. Ivan Grahek**

**Ivan Grahek**: Brown University; **Xiamin Leng**: Brown University; **Mahalia Prater Fahey**: Brown University; **Debbie Yee**: Brown University; **Amitai Shenhav**: Brown University

### T2.4 An Affective Probability Weighting Function for Risky Choice with Nonmonetary Outcomes

Presenting Author: **Kamil Fulawka**

**Kamil Fulawka**: Max Planck Institute for Human Development; **Thorsten Pachur**: Max Planck Institute for Human Development

### T2.5 "Because I want to": Valuing goals for their own sake

Presenting Author: **Junyi Chu**

**Junyi Chu**: Massachusetts Institute of Technology; **Laura Schulz**: Massachusetts Institute of Technology

### T3.1 Modeling risky food sharing as rational communication about relationships

Presenting Author: **Michelle Simona Hung**

**Michelle Simona Hung**: MIT; **Ashley J Thomas**: Massachusetts Institute of Technology; **Setayesh Radkani**: MIT; **Josh Tenenbaum**: MIT; **Rebecca Saxe**: MIT

### T3.2 Modeling punishment as a rational communicative social action

Presenting Author: **Setayesh Radkani**

**Setayesh Radkani**: MIT; **Josh Tenenbaum**: MIT; **Rebecca Saxe**: MIT

### T3.3 Inferring epistemic intention in simulated physical microworlds

Presenting Author: **Stephanie Droop**

**Stephanie Droop**: University of Edinburgh; **Neil R Bramley**: University of Edinburgh

### T3.4 Reasoning about the antecedents of emotions: Bayesian causal inference over an intuitive theory of mind

Presenting Author: **Sean Dae Houlihan**

**Sean Dae Houlihan**: MIT; **Desmond Ong**: National University of Singapore; **Maddie Cusimano**: Massachusetts Institute of Technology; **Rebecca Saxe**: MIT

### T3.5 Partner effects and individual differences on perspective taking

Presenting Author: **Jia Loy**

**Jia Loy**: Saarland University; **Vera Demberg**: Saarland University

### T4.1 'Sally the Congressperson': The Role of Individual Ideology on the Processing and Production of English Gender-Neutral Role Nouns

Presenting Author: **Mx. Brandon Papineau**

**Brandon Papineau**: Stanford University; **Rob Podesva**: Stanford University; **Judith Degen**: Stanford University



#### T4.2 *Evaluating models of referring expression production on an emerging sign language*

Presenting Author: **Leyla Kursat**

**Leyla Kursat**: Stanford University; **Brandon Waldon**: Stanford University; **Rabia Ergin**: Boğaziçi; **Judith Degen**: Stanford University

#### T4.3 *Statistical learning of orthotactic constraints: new insights from typing*

Presenting Author: **Dr. Nilsu Atilgan**

**Nilsu Atilgan**: Carnegie Mellon University; **Elizabeth Chu**: Carnegie Mellon University; **Nazbanou Nozari**: Carnegie Mellon University

#### T4.4 *Woman or tennis player? Visual typicality and lexical frequency affect variation in object naming*

Presenting Author: **Eleonora Gualdoni**

**Eleonora Gualdoni**: Universitat Pompeu Fabra; **Thomas Brochhagen**: Universitat Pompeu Fabra; **Andreas Mädebach**: Universidad Pompeu Fabra; **Gemma Boleda**: Universitat Pompeu Fabra

#### T4.5 *The bouba-kiki effect in a production task*

Presenting Author: **Mahayana Godoy**

**Mahayana Godoy**: Federal University of Rio Grande do Norte; **Thayná Ananias**: UFRN

#### T5.1 *A Naturalness Gradient Shapes the Learnability and Cross-Linguistic Distribution of Morphological Paradigms*

Presenting Author: **Dr. Carmen Saldana**

**Carmen Saldana**: University of Zurich; **Borja Herce**: University of Zurich; **Balthasar Bickel**: University of Zurich

#### T5.2 *Word formation supports efficient communication: The case of compounds*

Presenting Author: **Aotao Xu**

**Aotao Xu**: University of Toronto; **Charles Kemp**: University of Melbourne; **Lea Frermann**: University of Melbourne; **Yang Xu**: University of Toronto

#### T5.3 *Can a pressure against homophones explain phonological neighborhoods?*

Presenting Author: **Sean Trott**

**Sean Trott**: UC San Diego; **Benjamin Bergen**: UC San Diego

#### T5.4 *The complexity of a language is shaped by the communicative needs of its users and by the hierarchical nature of their social inferences*

Presenting Author: **Vlad C Nedelcu**

**Vlad C Nedelcu**: University of Edinburgh; **Kenny Smith**: University of Edinburgh

#### T5.5 *The Influence of Category-specific and System-wide Preferences on Cross-Linguistic Word Order Patterns*

Presenting Author: **Annie Holtz**

**Annie Holtz**: The University of Edinburgh; **Simon Kirby**: The University of Edinburgh; **Jennifer Culbertson**: University of Edinburgh

#### T6.1 *Social Interaction Dynamics Modulates Collective Creativity*

Presenting Author: **Lior Noy**

**Maor Rosenberg**: Tel-Aviv University; **Goren Gordon**: Tel Aviv University; **Lior Noy**: Ono Academic College (OAC); **Kristian Tuyen**: Aarhus University

#### T6.2 *Ingroup-Biased Copying Promotes Cultural Diversity and Complexity*

Presenting Author: **Marcel Montrey**

**Marcel Montrey**: McGill University; **Thomas Shultz**: McGill University

#### T6.3 *Conceptual recoding of new ideas during and after solution of an insight problem*

Presenting Author: **Professor Thomas C Ormerod**

**Thomas C Ormerod**: University of Sussex; **James N. MacGregor**: University of Victoria; **Adrian Banks**: University of Surrey; **Patrice Rusconi**: University of Messina

#### T6.4 *Diversity in Mathematical Insight Experiences in the Wild: Evidence of Opportunistic Assimilation*

Presenting Author: **Stacy Shaw**

**Stacy Shaw**: Worcester Polytechnic Institute

#### T6.5 *Mathematical insights as novel connections: Evidence from expert mathematicians*

Presenting Author: **Shadab Tabatabaeian**

**Shadab Tabatabaeian**: University of California Merced; **Artemisia Deluna**: -; **David Landy**: Indiana University, Bloomington; **Tyler Marghetis**: University of California, Merced

#### T7.1 *Relation Representations in Analogical Reasoning and Recognition Memory*

Presenting Author: **Nicholas Ichien**

**Nicholas Ichien**: University of California, Los Angeles; **Katherine L Alfred**: Dartmouth College; **Sophia Rose Baia**: University of California, Berkeley; **David J. M. Kraemer**: Dartmouth College; **Silvia Bunge**: University of California, Berkeley; **Hongjing Lu**: UCL

#### T7.2 *Structural vs. Superficial Similarity During Unprompted Analogical Retrieval: Which one Exerts a Greater Force?*

Presenting Author: **Ricardo Minervino**

**Ricardo A Minervino**: University of Comahue; **Maximo Trench**: University of Comahue



### T7.3 From Vision to Reasoning: Probabilistic Analogical Mapping Between 3D Objects

Presenting Author: **Shuhao Fu**

**Shuhao Fu**: UCLA; **Hongjing Lu**: UCLA; **Keith Holyoak**: University of California, Los Angeles

### T7.4 Generative Inferences in Relational and Analogical Reasoning: A Comparison of Computational Models

Presenting Author: **Nicholas Ichien**

**Nicholas Ichien**: University of California, Los Angeles; **Angela Kan**: University of California, Los Angeles; **Keith Holyoak**: University of California, Los Angeles; **Hongjing Lu**: UCLA

### T7.5 Building Blocks of Recursive Pattern Processing in Human Adults

Presenting Author: **Abhishek Dedhe**

**Abhishek Dedhe**: Carnegie Mellon University; **Steven Piantadosi**: UC Berkeley; **Jessica Cantlon**: Carnegie Mellon

### T8.1 Language universals rely on social cognition: Computational models of the use of this and that to redirect the receiver's attention

Presenting Author: **Dr. Marieke S Woensdregt**

**Marieke S Woensdregt**: Max Planck Institute for Psycholinguistics; **Julian Jara-Ettinger**: Yale University; **Paula Rubio-Fernandez**: University of Oslo

### T8.2 Rational Inference from Number Agreement Mismatch

Presenting Author: **Peng Qian**

**Peng Qian**: MIT; **Edward Gibson**: Massachusetts Institute of Technology; **Roger Levy**: Massachusetts Institute of Technology

### T8.3 A Mentalistic Semantics Explains "Each" and "Every" Quantifier Use

Presenting Author: **Tyler Knowlton**

**Tyler Knowlton**: University of Pennsylvania; **John Trueswell**: University of Pennsylvania; **Anna Papafragou**: University of Pennsylvania

### T8.4 Teasing apart models of pragmatics using optimal reference game design

Presenting Author: **Irene Zhou**

**Irene Zhou**: Massachusetts Institute of Technology; **Jennifer Hu**: Massachusetts Institute of Technology; **Roger Levy**: Massachusetts Institute of Technology; **Noga Zaslavsky**: MIT

### T8.5 A Rational Speech-Act model for the pragmatic use of vague terms in natural language

Presenting Author: **Alexandre Cremers**

**Alexandre Cremers**: Vilniaus Universitetas

### T9.1 Event structure predicts temporal interpretation of English and German past-under-past relative clauses

Presenting Author: **Eva Wittenberg**

**Elena Marx**: Central European University; **Eva Wittenberg**: Central European University

### T9.2 New Analyses of Lexical Influences on the Processing of Pseudo-homophones in the Lexical Decision Task: Still More Challenges for Models of Visual Word Recognition

Presenting Author: **Robert S McCann**

**Robert S McCann**: NASA Ames Research Center (ret); **Blair C. Armstrong**: University of Toronto; **Michael G. Reynolds**: Trent University; **Derek Besner**: University of Waterloo

### T9.3 Readers do not strongly rely on full-context information, but might utilize local word statistics, when 'correcting' word transposition errors in text

Presenting Author: **Kuan-Jung Huang**

**Kuan-Jung Huang**: University of Massachusetts; **Adrian Staub**: University of Massachusetts

### T9.4 The perceptual generalization of normalized cue distributions across speakers

Presenting Author: **Wei Lai**

**Wei Lai**: Vanderbilt University; **Aini Li**: University of Pennsylvania

### T9.5 Individuals differ cross-linguistically in cue weighting: A computational evaluation of cue-based retrieval in sentence processing

Presenting Author: **Himanshu Yadav**

**Himanshu Yadav**: University of Potsdam; **Garrett Smith**: Universität Potsdam; **Daniela Mertzen**: University of Potsdam; **Ralf Engbert**: University of Potsdam; **Shravan Vasishth**: Potsdam

### T10.1 Distinct Developmental Trajectories In The Cognitive Components Of Complex Planning

Presenting Author: **Wei Ji Ma**

**Ili Ma**: Leiden University; **Camille V Phaneuf**: Harvard University; **Bas van Opheusden**: Princeton University; **Wei Ji Ma**: New York University; **Catherine Hartley**: New York University

### T10.2 Revisiting the Inverted-U: Congruency Tasks Reveal Divergent Developmental Trajectories

Presenting Author: **Dr. Christopher D. Erb**

**Christopher D. Erb**: University of Auckland; **Laura Germine**: McLean Hospital; **Joshua K Hartshorne**: Boston College

### T10.3 Young children learn equally from real and thought experiments

Presenting Author: **Igor Bascandzhev**

**Igor Bascandzhev**: Harvard Graduate School of Education; **Susan Carey**: Harvard University

#### T10.4 *The Role of Alternatives in Children's Reasoning about Constrained Choices*

Presenting Author: **Dr. Jamie Amemiya**

**Jamie Amemiya:** University of California, San Diego; **Gail D. Heyman:** UC San Diego; **Caren M. Walker:** University of California San Diego

#### T10.5 *Eight-Month-Old Infants' Social Evaluations of Agents Who Act on False Beliefs*

Presenting Author: **Brandon Matthew Woo**

**Brandon Matthew Woo:** Harvard University; **Elizabeth Spelke:** Harvard University

#### T11.1 *Defending Diversity: Providing Examples from Different Domains Enhances Application of System Principles Beyond the Domains Covered by the Examples*

Presenting Author: **Verónica S D'Angelo**

**Verónica S D'Angelo:** Universidad Nacional de Córdoba; **Maximo Trench:** University of Comahue

#### T11.2 *Differentiating Exceptions in Rule-Plus-Exception Category Learning*

Presenting Author: **Yongzhen Xie**

**Yongzhen Xie:** University of Toronto; **Michael L. Mack:** University of Toronto

#### T11.3 *Rule discovery performance unchanged by incentives*

Presenting Author: **Pamela Joy Osborn Popp**

**Pamela Joy Osborn Popp:** New York University; **Ben Newell:** University of New South Wales; **Daniel Bartels:** University of Chicago; **Todd M Gureckis:** New York University

#### T11.4 *Categorization in Environments that Change when People Learn*

Presenting Author: **Manuel Villarreal**

**Manuel Villarreal:** University of California Irvine; **Sahar Vaday:** University of California Irvine; **Michael Lee:** University of California Irvine

#### T11.5 *Can Humans Do Less-Than-One-Shot Learning?*

Presenting Author: **Maya Malaviya**

**Maya Malaviya:** Princeton University; **Ilia Sucholutsky:** Princeton University; **Kerem Oktar:** Princeton University; **Tom Griffiths:** Princeton University

#### T12.1 *Evidence for Multiple Mechanisms Underlying List-Method Directed Forgetting*

Presenting Author: **Hannah Dames**

**Hannah Dames:** University of Freiburg; **Daniel Brand:** University of Technology Chemnitz; **Marco Ragni:** TU Chemnitz

#### T12.2 *Emphasizing associations from encoding affects free recall at retrieval*

Presenting Author: **Bryan Hong**

**Bryan Hong:** University of Toronto; **Carleigh A Pace-Tonna:** University of Toronto; **Morgan Barens:** University of Toronto; **Michael L. Mack:** University of Toronto

#### T12.3 *A model of free recall for multiple encounters of semantically related stimuli with an application to understanding cognitive impairment*

Presenting Author: **Holly A Westfall**

**Holly A Westfall:** University of California, Irvine; **Michael Lee:** UC Irvine

#### T12.4 *Learning depends on knowledge: The benefits of retrieval practice vary for facts and skills*

Presenting Author: **Paulo Carvalho**

**Paulo Carvalho:** Carnegie Mellon University; **Napol Rachatasumrit:** Carnegie Mellon University; **Kenneth R Koedinger:** Carnegie Mellon University

#### T12.5 *Thinking about doing: Representations of skill learning*

Presenting Author: **Xiuyuan Zhang**

**Xiuyuan Zhang:** Yale University; **Samuel David McDougale:** Yale University; **Julia Anne Leonard:** Yale University

#### T13.1 *The value of host-country language: The effect of Dutch language proficiency on immigrants' income, savings and financial wealth in the Netherlands*

Presenting Author: **Dr Yan Gu**

**Yeqiu Zheng:** Erasmus University Rotterdam; **Yan Gu:** UCL; **Albert Backus:** Tilburg University; **Arthur van Soest:** Tilburg University

#### T13.2 *Speech Rhythm Auto-Recurrence is Negatively Linked to Quality of Mental-Health Counseling Interactions*

Presenting Author: **Dr Vera Kempe**

**Vera Kempe:** Abertay University; **Mark A. Adams:** University of Reading; **George Lovell:** Abertay University; **Janet F McLean:** Abertay University; **Kate Smith:** Abertay University

#### T13.3 *Effects of Language on Social Essentialist Beliefs and Stigma about Mental Illness*

Presenting Author: **Katherine Williams**

**Katherine Williams:** University of Texas at Austin; **A. Alban Foulser:** University of Texas at Austin; **Katharine A Tillman:** UT Austin

### T13.4 *So much for plain language: An analysis of the accessibility of United States federal laws (1951-2009)*

Presenting Author: **Eric Martinez**

**Eric Martinez:** Massachusetts Institute of Technology; **Francis Mollica:** University of Edinburgh; **Edward Gibson:** Massachusetts Institute of Technology

### T13.5 *What carries greater social weight, a linguistic variant's local use or its typical use?*

Presenting Author: **Charlotte Vaughn**

**Charlotte Vaughn:** University of Maryland

### T14.1 *Immature vocalizations simplify the speech of Tzeltal Mayan and US caregivers*

Presenting Author: **Steven Elmlinger**

**Steven Elmlinger:** Cornell University; **Michael Goldstein:** Cornell University; **Marisa Casillas:** University of Chicago

### T14.2 *Semantic priming supports infants' ability to represent and name unseen objects*

Presenting Author: **Dr. Elena Luchkina**

**Elena Luchkina:** Northwestern University; **Sandra Waxman:** Northwestern University

### T14.3 *Does Contextual Diversity Hinder Early Word Acquisition?*

Presenting Author: **Tyler A Chang**

**Tyler A Chang:** UC San Diego; **Benjamin Bergen:** UC San Diego

### T14.4 *Language learners' unacceptability judgments improve with repeated exposure to acceptable sentences*

Presenting Author: **Karina Tachihara**

**Karina Tachihara:** Princeton University; **Adele Goldberg:** Princeton University

### T14.5 *Estimating demographic bias on tests of children's early vocabulary*

Presenting Authors: **George Kachergis & Nathan Francis**

**George Kachergis:** Stanford University; **Nathan Francis:** Stanford University; **Michael C. Frank:** Stanford University

### T15.1 *How does the latent scope bias occur?: Cognitive modeling for the probabilistic reasoning process of causal explanations under uncertainty*

Presenting Author: **Yuki Tsukamura**

**Yuki Tsukamura:** The University of Tokyo; **Taisei Wakai:** The University of Tokyo; **Asaya Shimojo:** Konica Minolta, Inc.; **Kazuhiro Ueda:** The University of Tokyo

### T15.2 *Eye-tracking mental simulation during retrospective causal reasoning*

Presenting Author: **Kristina Krasich**

**Kristina Krasich:** Duke University; **Kevin O'Neill:** Duke University; **Felipe DeBrigard:** Duke University

### T15.3 *Using pretense behavior to explore counterfactual self-simulation*

Presenting Author: **Matan Mazor**

**Matan Mazor:** Birkbeck, University of London; **Chaz Firestone:** Johns Hopkins University; **Ian Phillips:** Johns Hopkins University

### T15.4 *Domain-general modal spaces play a foundational role throughout high-level cognition*

Presenting Author: **Jonathan Phillips**

**Eli Hecht:** Dartmouth College; **Jonathan Phillips:** Dartmouth College

### T15.5 *No privileged link between intentionality and causation: Generalizable effects of agency in language*

Presenting Author: **Sehrang Joo**

**Sehrang Joo:** Yale University; **Sami R Yousif:** Yale University; **Fabienne Martin:** Humboldt-Universität zu Berlin; **Frank Keil:** Yale University; **Joshua Knobe:** Yale University

### T16.1 *What is the CRT? Intelligence, Personality, Decision Style or Attention?*

Presenting Author: **Dr Matthew Brian Welsh**

**Matthew Brian Welsh:** University of Adelaide

### T16.2 *A Right Way to Explain? Function, Mechanism, and the Order of Explanations*

Presenting Author: **Amanda McCarthy**

**Amanda McCarthy:** Yale University; **Frank Keil:** Yale University

### T16.3 *The Diversity of Argument-Making in the Wild: from Assumptions and Definitions to Causation and Anecdote in Reddit's "Change My View"*

Presenting Author: **Prof Simon DeDeo**

**Robin W Na:** Massachusetts Institute of Technology; **Simon DeDeo:** Carnegie Mellon University

### T16.4 *Generalizing Syllogistic Reasoning: Extending Syllogisms to General Quantifiers*

Presenting Author: **Marco Ragni**

**Daniel Brand:** Chemnitz University of Technology; **Maximilian Mittenbühler:** University of Freiburg; **Marco Ragni:** TU Chemnitz

### T16.5 Question-answer dynamics in deductive fallacies without language

Presenting Author: **Dr. Wooljin Chung**

**Wooljin Chung:** Seoul National University; **Nadine Bade:** University of Potsdam; **Sam Blanc-Cuenca:** École Normale Supérieure; **Salvador Mascarenhas:** Ecole Normale Supérieure

### T17.1 There must be another way! Girls are disadvantaged when divesting from inaccurate teaching is required

Presenting Author: **Mia Radovanovic**

**Mia Radovanovic:** University of Toronto; **Ece Yucer:** University of Toronto; **Jessica Sommerville:** University of Toronto

### T17.2 Inhibitory Control Predicts Academic Performance Beyond Fluid Intelligence and Processing Speed in English-Immersed Chinese High Schoolers

Presenting Author: **Adam John Privitera**

**Adam John Privitera:** Wenzhou-Kean University; **Yu Zhou:** Wenzhou-Kean University; **Xiaoyi Xie:** Wenzhou-Kean University; **Dandan Huang:** Small Bird Education

### T17.3 Adolescents are most motivated by encouragement from someone who knows their abilities and the domain

Presenting Author: **Mika Asaba**

**Mika Asaba:** Yale University; **Melissa Santos:** Yale University; **Julian Jara-Ettinger:** Yale University; **Julia Anne Leonard:** Yale University

### T17.4 The source and type of feedback influence children's mathematics performance

Presenting Author: **Megan V Merrick**

**Megan V Merrick:** Indiana University - Bloomington; **Emily R. Fyfe:** Indiana University

### T17.5 Testing a Unified Model of Arithmetic

Presenting Author: **Dr David W Braithwaite**

**David W Braithwaite:** Florida State University; **Robert Siegler:** Teachers College, Columbia University

### T18.1 A Visuo-Sensorimotor Network of Processing Gesture-Speech Semantic Variation

Presenting Author: **Kawai Chui**

**Kawai Chui:** National Chengchi University; **Kanyu Yeh:** National Chengchi University; **Ting-Ting Chang:** National Chengchi University; **Chan-Tat Ng:** National Chengchi University

### T18.2 Getting Situated: Comparative Analysis of Language Models With Experimental Categorization Tasks

Presenting Author: **Andy Edinger**

**Andy Edinger:** Indiana University; **Robert Goldstone:** Indiana University

### T18.3 Semantic features of object concepts generated with GPT-3

Presenting Author: **Hannes Hansen**

**Hannes Hansen:** Max Planck Institute for Human Cognitive and Brain Sciences; **Martin N Hebart:** Max Planck Institute for Human Cognitive and Brain Sciences

### T18.4 A Neural Dynamic Model Perceptually Grounds Nested Noun Phrases

Presenting Author: **M.Sc. Daniel Sabinasz**

**Daniel Sabinasz:** Institut für Neuroinformatik; **Gregor Schöner:** Ruhr-Universität Bochum

### T18.5 Structured, flexible, and robust: benchmarking and improving large language models towards more human-like behavior in out-of-distribution reasoning tasks

Presenting Author: **Katherine M Collins**

**Katherine M Collins:** MIT; **Catherine Wong:** Massachusetts Institute of Technology; **Jiahai Feng:** MIT; **Megan Wei:** Massachusetts Institute of Technology; **Josh Tenenbaum:** MIT

### T19.1 Cross-modal perceptual learning in learning a tonal language

Presenting Author: **Dr Xin Wang**

**Xin Wang:** Macquarie University; **Luan Li:** East China Normal University; **Bob McMurray:** University of Iowa

### T19.2 "Most" is easy but "least" is hard: Novel determiner learning in 4-year-olds

Presenting Author: **Dr Angela Xiaoxue He**

**Angela Xiaoxue He:** Hong Kong Baptist University; **Alexis C Wellwood:** University of Southern California

### T19.3 From doggy to dog: Developmental shifts in children's use of register-specific words

Presenting Author: **Kennedy Casey**

**Kennedy Casey:** University of Chicago; **Marisa Casillas:** University of Chicago

### T19.4 Mapping words to the world: Adults prioritize grammar, but children prioritize descriptions

Presenting Author: **Gabor Brody**

**Gabor Brody:** Brown University; **Roman Feiman:** Brown University



### T19.5 *Preschoolers and adults make inferences from novel metaphors*

Presenting Author: **Rebecca Zhu**

**Rebecca Zhu:** University of California, Berkeley; **Alison Gopnik:** University of California at Berkeley

### T20.1 *Attentional Bias for Self-Face: Investigation using Drift Diffusion Modelling*

Presenting Author: **Ms. Aditi Jublie**

**Aditi Jublie:** Indian Institute of Technology Kanpur; **Devpriya Kumar:** Indian Institute of Technology, Kanpur

### T20.2 *Exploring the Racial Bias in Pain Detection with a Computer Vision Model*

Presenting Author: **Virginia de Sa**

**Sarah Fabi:** University of Tübingen; **Xiaojing Xu:** University of California San Diego; **Virginia de Sa:** UC San Diego

### T20.3 *Categorizing Ambiguous Facial Expressions*

Presenting Author: **Ilya Nudnou**

**Ilya Nudnou:** North Dakota State University; **Benjamin Balas:** North Dakota State University

### T20.4 *Modeling Cue-integration in Emotion Inferences*

Presenting Author: **Srishti Goel**

**Srishti Goel:** Yale University; **Julian Jara-Ettinger:** Yale University; **Maria T Gendron:** Yale University

### T20.5 *Alignment of Knowing Versus Feeling the Emotion in Music During Middle-Childhood*

Presenting Author: **Rista C Plate**

**Rista C Plate:** University of Pennsylvania; **Callie Jones:** University of Pennsylvania; **Joshua S Steinberg:** University of Pennsylvania; **Grace Daley:** University of Pennsylvania; **Sylvia Zhao:** University of Pennsylvania; **Rebecca Waller:** University of Pennsylvania

### T21.1 *Children's Judgments About Asking for Past, Present, and Future Information from Google and a Person*

Presenting Author: **Lauren Girouard-Hallam**

**Lauren Girouard-Hallam:** University of Louisville; **Judith Danovitch:** University of Louisville

### T21.2 *Trusting algorithms: performance, explanations, and sticky preferences*

Presenting Author: **Mr Garston Liang**

**Garston Liang:** University of New South Wales; **Ben Newell:** University of New South Wales

### T21.3 *How do people incorporate advice from artificial agents when making physical judgments?*

Presenting Author: **Erik Brockbank**

**Erik Brockbank:** University of California San Diego; **Haoliang Wang:** University of California, San Diego; **Justin Yang:** University of California, San Diego; **Suvir Mirchandani:** Stanford University; **Erdem Biyik:** Stanford University; **Dorsa Sadigh:** Stanford University

### T21.4 *Fuzzy Performance Profiles: Towards Personalized CPR Refresher Training*

Presenting Author: **Florian Sense**

**Florian Sense:** InfiniteTactics LLC; **Lauren Sanderson:** RQI Partners, LLC; **Joshua Onia:** RQI Partners, LLC; **Michael Krusmark:** Wright-Patterson Air Force Base; **Joshua Fiechter:** Kairos Research; **Michael Gordon Collins:** Wright State University; **Tiffany Jastrzem**

### T21.5 *The Power of Nudging: Exploring Three Interventions for Metacognitive Skills Instruction across Intelligent Tutoring Systems*

Presenting Author: **Mark Abdelshiheed**

**Mark Abdelshiheed:** North Carolina State University; **John Wesley Hostetter:** North Carolina State University; **Preya Shabrina:** North Carolina State University; **Tiffany Barnes:** North Carolina State University; **Min Chi:** North Carolina State University

### T22.1 *Bridging DFT and DNNs: A neural dynamic process model of scene representation, guided visual search and scene grammar in natural scenes*

Presenting Author: **Raul Grieben**

**Raul Grieben:** Ruhr-Universität Bochum; **Gregor Schöner:** Ruhr-Universität Bochum

### T22.2 *A Developmentally-Inspired Examination of Shape versus Texture Bias in Machines*

Presenting Author: **Alexa R. Tartaglioni**

**Alexa R. Tartaglioni:** New York University; **Wai Keen Vong:** New York University; **Brenden Lake:** New York University

### T22.3 *Biological Softmax: Demonstrated in Modern Hopfield Networks*

Presenting Author: **Mallory A Snow**

**Mallory A Snow:** University of Waterloo; **Jeff Orchard:** University of Waterloo

### T22.4 *CogNGen: Building the Kernel for a Hyperdimensional Predictive Processing Cognitive Architecture*

Presenting Author: **Dr. Alexander Ororbia**

**Alexander Ororbia:** Rochester Institute of Technology; **M. Alex Kelly:** Carleton University

### T22.5 *The Perceiver Architecture is a Functional Global Workspace*

Presenting Author: **Dr. Arthur Juliani**

**Arthur Juliani:** ARAYA Inc.; **Ryota Kanai:** Araya Inc.; **Shuntaro Sasai:** Araya Inc.

### T23.1 *The impact of mask use on social categorization*

Presenting Author: **Ms Yueyuan Zheng**

**Yueyuan Zheng:** University of Hong Kong; **Danni Chen:** University of Hong Kong; **Xiaoqing Hu:** University of Hong Kong; **Janet Hsiao:** University of Hong Kong

### T23.2 *Studying the Effect of Oral Transmission on Melodic Structure using Online Iterated Singing Experiments*

Presenting Author: **Manuel Anglada-Tort**

**Manuel Anglada-Tort:** Max Planck Institute for Empirical Aesthetics; **Peter M. C. Harrison:** University of Cambridge; **Nori Jacoby:** Max Planck Institute for Empirical Aesthetics

### T23.3 *Cultural Invariance in Musical Communication*

Presenting Author: **Lidya Yurdum**

**Lidya Yurdum:** University of Amsterdam; **Manvir Singh:** Harvard University; **Luke Glowacki:** Boston University; **Tom Vardy:** University of Auckland; **Quentin Atkinson:** University of Auckland; **Courtney B Hilton:** Haskins Laboratories; **Disa Sauter:** University of Ams

### T23.4 *Culture and Commutativity*

Presenting Author: **Isabelle Boni**

**Isabelle Boni:** University of California Berkeley; **Steven Piantadosi:** UC Berkeley

### T23.5 *Sticks, leaves, buckets, and bowls: Distributional patterns of children's at-home object handling in two subsistence societies*

Presenting Author: **Kennedy Casey**

**Kennedy Casey:** University of Chicago; **Mary Elliott:** University of Texas at Dallas; **Elizabeth Mickiewicz:** University of Chicago; **Anapaula Silva Mandujano:** University of Chicago; **Kimberly Shorter:** University of Chicago; **Mara Duquette:** University of Chicago;

### T24.1 *The Wisdom of the Crowd and Framing Effects in Spatial Knowledge*

Presenting Author: **Lauren E Montgomery**

**Lauren E Montgomery:** University of California, Irvine; **Michael Lee:** University of California Irvine

### T24.2 *Beyond the physical divide of Greek Cypriots and Turkish Cypriots: Social and political variables shape geographical estimates*

Presenting Author: **Alexia Galati**

**Alexia Galati:** University of North Carolina at Charlotte; **Miria N Plastira:** University of Cyprus; **Alinda Friedman:** University of Alberta; **Marios N Avraamides:** University of Cyprus

### T24.3 *Neighborhoods, Directions and Distances: Segmentation Effects in a Real-World City*

Presenting Author: **Merve Tansan**

**Merve Tansan:** Temple University; **Thomas Shipley:** Temple University; **Nora Newcombe:** Temple U

### T24.4 *Large-Scale vs Small-Scale Spatial Abilities: Development of a Broad Spatial Activities Questionnaire*

Presenting Author: **Mitchell Eric Munns**

**Mitchell Eric Munns:** University of California, Santa Barbara; **Bailey Tranquada-Torres:** University of California, Irvine; **Elizabeth Chrastil:** UC Irvine; **Mary Hegarty:** University of California, Santa Barbara

### T24.5 *Prior Spatial Knowledge Differentially Impacts Learning in Children and Young Adults*

Presenting Author: **Mx. Merron Woodbury**

**Merron Woodbury:** University of Toronto; **Chunan Duan:** University of Toronto; **Eryk Brol:** University of Toronto; **Rena Patricia Seeger:** University of Toronto; **Margaret L Schlichting:** University of Toronto

### T25.1 *Getting to the root of linguistic alignment: Testing the predictions of Interactive Alignment across developmental and biological variation in language skill*

Presenting Author: **Ruthe Foushee**

**Ruthe Foushee:** University of Chicago; **Dan Byrne:** University of Chicago; **Marisa Casillas:** University of Chicago; **Susan Goldin-Meadow:** University of Chicago

### T25.2 *Computational Complexity of Segmentation*

Presenting Author: **Federico Adolfi**

**Federico Adolfi:** Ernst-Strüngmann Institute for Neuroscience in Cooperation with Max-Planck Society; **Todd Wareham:** Memorial University of Newfoundland; **Iris van Rooij:** Radboud University

### T25.3 *Auditory and visual category learning in children*

Presenting Author: **Casey L Roark**

**Casey L Roark:** University of Pittsburgh; **Erica Lescht:** University of Pittsburgh; **Amanda Hampton Wray:** University of Pittsburgh; **Bharath Chandrasekaran:** University of Pittsburgh

### T25.4 *Uncovering children's concepts and conceptual change*

Presenting Author: **Pablo Leon Villagra**

**Pablo Leon Villagra:** Brown University; **Isaac Ehrlich:** University of Toronto; **Chris Lucas:** University of Edinburgh; **Daphna Buchsbaum:** Brown University



### T25.5 *An experimental study of semantic extension in a novel communication system*

Presenting Author: **Kenny Smith**

**Josephine Bowerman:** University of Edinburgh; **Kenny Smith:** University of Edinburgh

### T26.1 *Decision-Making with Naturalistic Options*

Presenting Author: **Can Demircan**

**Can Demircan:** Max Planck Institute for Biological Cybernetics; **Leonardo Pettini:** Max Planck Institute for Human Cognitive and Brain Sciences, Charité - Universitätsmedizin Berlin; **Tankred Saanum:** Max Planck Institute for Biological Cybernetics; **Marcel Bi**

### T26.2 *A joint analysis of dropout and learning functions in human decision-making with massive online data*

Presenting Author: **Ionatan Kuperwajs**

**Ionatan Kuperwajs:** New York University; **Wei Ji Ma:** New York University

### T26.3 *I Know Your Next Move: Action Decisions in Dyadic Pick and Place Tasks*

Presenting Author: **Miss Diana Babajanyan**

**Diana Babajanyan:** Macquarie University; **Gaurav Patil:** Macquarie University; **Maurice Lamb:** University of Skövde; **Rachel W. Kallen:** Macquarie University; **Michael J Richardson:** Macquarie University

### T26.4 *What is a consumer product for? How teleology guides judgments of product liability*

Presenting Author: **Maureen Gill**

**Maureen Gill:** Yale University; **Frank Keil:** Yale University

### T26.5 *Understanding intuitive theories of climate change*

Presenting Author: **Brittany Schotsch**

**Brittany Schotsch:** Arizona State University; **Derek Powell:** Arizona State University

### T27.1 *Towards Situated Communication in Multi-Step Interactions: Time is a Key Pressure in Communication Emergence*

Presenting Author: **Dr Elnaz Davoodi**

**Aleksandra Kalinowska:** DeepMind; **Elnaz Davoodi:** DeepMind; **Kory W. Mathewson:** DeepMind; **Todd Murphey:** Northwestern University; **Patrick M. Pilarski:** DeepMind Technologies, Ltd.

### T27.2 *Two's company but six is a crowd: emergence of conventions in multiparty communication games*

Presenting Author: **Veronica Boyce**

**Veronica Boyce:** Stanford University; **Robert Hawkins:** Princeton University; **Noah Goodman:** Stanford University; **Michael C. Frank:** Stanford University

### T27.3 *Culture, communicative need, and the efficiency of semantic categories*

Presenting Author: **Shan Gao**

**Shan Gao:** Independent Researcher; **Terry Regier:** UC Berkeley

### T27.4 *Need for Structure and the Emergence of Communication*

Presenting Author: **MSc. Tom Kouwenhoven**

**Tom Kouwenhoven:** Creative Intelligence Lab; **Roy de Kleijn:** Cognitive Psychology Unit; **Stephan Raaijmakers:** Leiden University; **Tessa Verhoef:** Leiden University

### T27.5 *Where Questions Come From: Reusing Old Questions in New Situations*

Presenting Author: **Emily G Liquin**

**Emily G Liquin:** New York University; **Todd M Gureckis:** New York University

### T28.1 *Task Unrelated Thoughts (TUT) affecting mood in ecological settings: from adaptive mind-wandering to maladaptive rumination.*

Presenting Author: **dr Monika Kornacka**

**Monika Kornacka:** SWPS University of Social Sciences and Humanities; **Thierry Atzeni:** Université Savoie Mont Blanc; **Izabela Krejtz:** SWPS University of Social Sciences and Humanities; **Catherine Bortolon:** Univ. Grenoble Alpes, Univ. Savoie Mont Blanc; **Celine**

### T28.2 *A Computational Model of Unintentional Mind Wandering in Focused Attention Meditation*

Presenting Author: **Isaac Christian**

**Isaac Christian:** Princeton University; **Mayank Agrawal:** Princeton University

### T28.3 *Limitations to Optimal Search in Naturalistic Active Learning*

Presenting Author: **Sudeep Bhatia**

**Lisheng He:** Shanghai University; **Russell Richie:** Children's Hospital of Philadelphia; **Sudeep Bhatia:** University of Pennsylvania

### T28.4 *Learning as Programming: Modeling Efficient Search in Human Concept Learning*

Presenting Author: **Joshua S Rule**

**Joshua S Rule:** UC Berkeley; **Steven Piantadosi:** UC Berkeley; **Josh Tenenbaum:** MIT

### T28.5 *Fast and frugal memory search for communication*

Presenting Author: **Collin J. Kovacs**

**Collin J. Kovacs:** Indiana University; **Jasper M. Wilson:** Washington University in St. Louis; **Abhilasha A Kumar:** Indiana University

### T29.1 Temporal Dynamic Weighted Graph Convolution for Multi-agent Reinforcement Learning

Presenting Author: Yuntao Liu

**Yuntao Liu:** National University of Defense Technology; **Yong Dou:** National University of Defense Technology; **Yuan Li:** Academy of Military Science; **Xinhai Xu:** Academy of Military Science; **Donghong Liu:** Academy of Military Science

### T29.2 Exploring an Imagined “We” in Human Collective Hunting: Joint Commitment within Shared Intentionality

Presenting Author: Ning Tang

**Ning Tang:** Zhejiang University; **Siyi Gong:** University of California, Los Angeles; **Minglu Zhao:** University of California - Los Angeles; **Chenya Gu:** Zhejiang University; **Jifan Zhou:** Zhejiang University; **Mowei Shen:** Zhejiang University; **Tao Gao:** UCLA

### T29.3 Learning and enforcing a cultural consensus in online communities

Presenting Author: Necdet Gurkan

**Necdet Gurkan:** Stevens Institute of Technology; **Jordan W. Suchow:** Stevens Institute of Technology

### T29.4 Fishing Free-Riders using Altruism: Zero-Sum Fitness Competition in Prey-Predator System

Presenting Author: Jehun Hong

**Jehun Hong:** Seoul National University; **Jain Gu:** Sungkyunkwan University; **Yoon Kyung Lee:** Seoul National University; **Sowon Hahn:** Seoul National University

### T29.5 ‘An ounce of loyalty’: Children’s expectations about loyalty and preference for in-group members and authority figures

Presenting Author: Megan N Norris

**Megan N Norris:** University of Louisville; **Nicholaus Noles:** University of Louisville

### T30.1 The development of commitment: Attention for intention

Presenting Author: Dr. Shuyi Zhai

**Shuyi Zhai:** Zhejiang University; **Shaozhe Cheng:** Zhejiang University; **Naomi Moskowitz:** UCLA; **Mowei Shen:** Zhejiang University; **Tao Gao:** UCLA

### T30.2 Children’s Cardinality Knowledge Isn’t Always Beneficial

Presenting Author: Jike Qin

**Jike Qin:** Xi’an Jiaotong-Liverpool University; **John Opfer:** The Ohio State University

### T30.3 Categorizing Dogs’ Real World Visual Statistics

Presenting Author: Madeline Helmer Pelgrim

**Madeline Helmer Pelgrim:** Brown University; **Daphna Buchsbaum:** Brown University

### T30.4 Great Apes and Human Children Rationally Monitor their Decisions

Presenting Author: Cathal O’Madagain

**Cathal O’Madagain:** Université Mohammed VI Polytechnique; **Katharina Helming:** University of Warwick; **Marco Schmidt:** University of Konstanz; **Eli Shupe:** University of Texas at Arlington; **Josep Call:** St. Andrews University; **Michael Tomasello:** Duke University

### T30.5 Habituation reflects optimal exploration over noisy perceptual samples

Presenting Author: Anjie Cao

**Anjie Cao:** Stanford ; **Gal Raz:** MIT; **Rebecca Saxe:** MIT; **Michael C. Frank:** Stanford University

### T31.1 Core words in semantic representation

Presenting Author: Andrew Wang

**Andrew Wang:** The University of Melbourne; **Simon De Deyne:** University of Melbourne; **Meredith McKague:** University of Melbourne; **Andrew Perfors:** University of Melbourne

### T31.2 Distrubutional Semantics Still Can’t Account for Affordances

Presenting Author: Cameron R Jones

**Cameron R Jones:** UC San Diego; **Tyler A Chang:** UC San Diego; **Seana Coulson:** UC San Diego; **James A Michaelov:** The University of California San Diego; **Sean Trott:** UC San Diego; **Benjamin Bergen:** UC San Diego

### T31.3 The polarity effect of evaluative language

Presenting Author: Prof. Dr. Kevin Reuter

**Lucien Baumgartner:** University of Zurich; **Pascale Willemsen:** University of Zurich; **Kevin Reuter:** University of Zurich

### T31.4 What Are Men and Mothers For? The Causes and Consequences of Functional Reasoning About Social Categories

Presenting Author: Emily Foster-Hanson

**Emily Foster-Hanson:** Princeton University; **Tania Lombrozo:** Princeton University

### T31.5 Infinite mixture chaining: Efficient temporal construction of word meaning

Presenting Author: Lei Yu

**Lei Yu:** University of Toronto; **Yang Xu:** University of Toronto

### T32.1 Revisiting Agreement: Do Children and Adults Compute Subject-verb Agreement Differently?

Presenting Author: Associate Professor Nazbanou Nozari

**Nazbanou Nozari:** Carnegie Mellon University; **Akira Omaki:** University of Washington

### T32.2 *Regularization or lexical probability-matching? How German speakers generalize plural morphology*

Presenting Author: **Kate McCurdy**

**Kate McCurdy:** University of Edinburgh; **Sharon Goldwater:** University of Edinburgh; **Adam Lopez:** University of Edinburgh

### T32.3 *Regularization of Word Order in the Verb Phrase differs from the Noun Phrase: Evidence from an online silent gesture perception paradigm*

Presenting Author: **Monica L. Do**

**Monica L. Do:** University of Chicago; **Simon Kirby:** The University of Edinburgh; **Susan Goldin-Meadow:** University of Chicago

### T32.4 *Explaining patterns of fusion in morphological paradigms using the memory--surprisal tradeoff*

Presenting Author: **Neil Rathi**

**Neil Rathi:** Palo Alto High School; **Michael Hahn:** Stanford University; **Richard Futrell:** UC Irvine

### T32.5 *Learnability and constraints on the semantics of clause-embedding predicates*

Presenting Author: **Wataru Uegaki**

**Mora Maldonado:** CNRS; **Jennifer Culbertson:** University of Edinburgh; **Wataru Uegaki:** University of Edinburgh

### T33.1 *A Hierarchical Model of Attention over Time*

Presenting Author: **Jaeah Kim**

**Jaeah Kim:** Carnegie Mellon University; **Shashank Singh:** Max Planck Institute for Intelligent Systems; **Dan Yurovsky:** Carnegie Mellon University; **Anna Fisher:** Carnegie Mellon University; **Erik Thiessen:** Carnegie Mellon University

### T33.2 *A Neural Network Model of Continual Learning with Cognitive Control*

Presenting Author: **Jacob Russin**

**Jacob Russin:** UC Davis; **Maryam Zolfaghar:** University of California, Davis; **Seongmin Park:** UC Davis; **Erie D. Boorman:** UC Davis; **Randall C. O'Reilly:** University of California Davis

### T33.3 *The Geometry of Map-Like Representations under Dynamic Cognitive Control*

Presenting Author: **Jacob Russin**

**Maryam Zolfaghar:** University of California, Davis; **Jacob Russin:** UC Davis; **Seongmin Park:** UC Davis; **Erie D. Boorman:** UC Davis; **Randall C. O'Reilly:** University of California Davis

### T33.4 *Fractional Binding in Vector Symbolic Architectures as Quasi-Probability Statements*

Presenting Author: **Michael Furlong**

**Michael Furlong:** University of Waterloo; **Chris Eliasmith:** University of Waterloo

### T33.5 *Improving a model of human planning via large-scale data and deep neural networks*

Presenting Author: **Ionatan Kuperwajs**

**Ionatan Kuperwajs:** New York University; **Heiko H Schuett:** New York University; **Wei Ji Ma:** New York University

### T34.1 *Ethical Explanations*

Presenting Author: **Casey Lewry**

**Casey Lewry:** Princeton University; **Tania Lombrozo:** Princeton University

### T34.2 *Narrating the "what" and "why" of our moral actions*

Presenting Author: **Judy Kim**

**Judy Kim:** Yale University; **Molly J Crockett:** Yale University

### T34.3 *The emergence of moral foundations in child language development*

Presenting Author: **Aida Ramezani**

**Aida Ramezani:** University of Toronto; **Emmy Liu:** Carnegie Mellon University; **Renato Ferreira Pinto Junior:** University of Toronto; **Spike W. S. Lee:** University of Toronto; **Yang Xu:** University of Toronto

### T34.4 *Contractualist Concerns Shape Moral Decisions and Moral Judgments*

Presenting Author: **Arthur Le Pargneux**

**Arthur Le Pargneux:** University of Warwick; **Nick Chater:** University of Warwick; **Hossam Zeitoun:** University of Warwick

### T34.5 *Flexibility in Moral Cognition: When is it okay to break the rules?*

Presenting Author: **Joseph Kwon**

**Joseph Kwon:** MIT; **Josh Tenenbaum:** MIT; **Sydney Levine:** Massachusetts Institute of Technology

### T35.1 *Sensorimotor processes are not a source of much noise: Sensory-motor and decision components of reaction times*

Presenting Author: **Neda Meibodi**

**Neda Meibodi:** Philipps-Universität Marburg; **Anna Schubö:** Philipps-Universität Marburg; **Dominik M Endres:** Philipps-Universität Marburg

### T35.2 *May the Force be against you: Better sensitivity to speed changes opposite to gravity*

Presenting Author: **Hong B. Nguyen**

**Hong B. Nguyen:** The New School; **Benjamin F. van Buren:** The New School

### T35.3 *Grounding meaning in the motor system: A p-curve analysis of the TMS and tDCS evidence*

Presenting Author: **Pablo Solana**

**Pablo Solana:** University of Granada; **Laura Miccoli:** University of Granada; **Julio Santiago:** University of Granada

### T35.4 *An Experimental-Linguistic Study of the Folk Concept of Pain: Implication, Projection, & Deniability*

Presenting Author: **Dr. Sabrina Coninx**

**Sabrina Coninx:** Institute for Philosophy II; **Pascale Willemsen:** University of Zurich; **Kevin Reuter:** University of Zurich

### T35.5 *The left hand of time: Roles of cultural and bodily experience in constructing the mental timeline*

Presenting Author: **Daniel Casasanto**

**Daniel Casasanto:** Cornell University; **Tom Gijssels:** University of Chicago; **Jason Hamm:** Cornell University

### T36.1 *Backgroundedness Predicts Island Status of Non-finite Adjuncts in English*

Presenting Author: **Adele Goldberg**

**Savithry Namboodiripad:** University of Michigan, Ann Arbor; **Nicole Cuneo:** Princeton University; **Mathew A. Kramer:** University of Michigan; **Yourdanis Sedarous:** University of Michigan; **Felicia Bisnath:** University of Michigan, Ann Arbor; **Yushi Sugimoto:** Univer

### T36.2 *No Such Thing as the Average Listener: Belief-driven versus Action-driven Strategies in Signaling*

Presenting Author: **Stephanie Stacy**

**Stephanie Stacy:** University of California - Los Angeles; **Yiling Yun:** University of California - Los Angeles; **Max Potter:** University of California, Los Angeles; **Naomi Moskowitz:** University of California, Los Angeles; **Tao Gao:** UCLA

### T36.3 *The role of production expectations in visual world paradigm linking hypotheses*

Presenting Author: **Judith Degen**

**Judith Degen:** Stanford University; **Stefan Pophristic:** Stanford University

### T36.4 *Declarative and imperative pointing acts by infants can be distinguished by accompanying preverbal vocalisations*

Presenting Author: **Johanna Schick**

**Johanna Schick:** University of Zurich; **Carmen Saldana:** University of Zurich; **klaus zuberbühler:** University of Neuchatel; **Sabine Stoll:** University of Zurich

### T36.5 *Mapping language onto mental representations of object locations in transfer-of-possession events: A visual-world study using webcam-based eye-tracking*

Presenting Author: **Sarah Hye-yeon Lee**

**Sarah Hye-yeon Lee:** University of Southern California; **Elsi Kaiser:** University of Southern California

### T37.1 *Mechanisms of Belief Persistence in the Face of Societal Disagreement*

Presenting Author: **Kerem Oktar**

**Kerem Oktar:** Princeton University; **Tania Lombrozo:** Princeton University

### T37.2 *A descriptive Bayesian account of optimism in belief revision*

Presenting Author: **Derek Powell**

**Derek Powell:** Arizona State University

### T37.3 *Does mere exposure to ideas encourage belief in them?*

Presenting Author: **Justin Mikell**

**Justin Mikell:** Arizona State University; **Derek Powell:** Arizona State University

### T37.4 *Credit assignment in hierarchical option transfer*

Presenting Author: **Jing-Jing Li**

**Jing-Jing Li:** UC Berkeley; **Liyu Xia:** University of California, Berkeley; **Flora Dong:** University of California, Berkeley; **Anne GE Collins:** UC Berkeley

### T37.5 *Stop, children what's that sound? Multi-modal inference through mental simulation*

Presenting Author: **Joseph Outa**

**Joseph Outa:** Stanford University; **Xi Jia Zhou:** Stanford University; **Hyowon Gweon:** Stanford University; **Tobias Gerstenberg:** Stanford University

### T38.1 *Does Social Sampling Differ Between Online and Offline Contacts? A Computational Modeling Analysis*

Presenting Author: **Marlene Hecht**

**Marlene Hecht:** Max Planck Institute for Human Development; **Thorsten Pachur:** Max Planck Institute for Human Development; **Christin Schulze:** Max Planck Institute for Human Development

### T38.2 *Inferring the internal structure of social collectives*

Presenting Author: **Isaac Davis**

**Isaac Davis:** Yale University; **Yarrow Dunham:** Yale University; **Julian Jara-Ettinger:** Yale University

### T38.3 *In the Dark: Agent-Based Modeling of Uninformed Individuals within Polarized Groups*

Presenting Author: **Shannon Werntz**

**Shannon Werntz:** Carnegie Mellon University; **Daniel Oppenheimer:** Carnegie Mellon University

### T38.4 *Diversity and homophily in social networks*

Presenting Author: **Sina Fazelpour**

**Sina Fazelpour:** Northeastern University; **Hannah Rubin:** University of Notre Dame



### T38.5 *How the cognitive mechanisms underlying fast choices influence information spread and response bias amplification in groups*

Presenting Author: **Alan Novaes Tump**

**Alan Novaes Tump:** Max Plack Institute Human Development; **Tim Pleskac:** University of Kansas; **Pawel Romanczuk:** Humboldt Universität zu Berlin; **Ralf Kurvers:** MPI for Human Development

### T39.1 *Language Learning from Communicative Goals and Linguistic Input*

Presenting Author: **Hao Zhu**

**Hao Zhu:** Carnegie Mellon University; **Yonatan Bisk:** Carnegie Mellon University; **Graham Neubig:** Carnegie Mellon University

### T39.2 *Examining Real-time Attention Dynamics in Parent-infant Picture Book Reading*

Presenting Author: **Yayun Zhang**

**Yayun Zhang:** University of Texas - Austin; **Chen Yu:** University of Texas at Austin

### T39.3 *Communicative Feedback as a Mechanism Supporting the Production of Intelligible Speech in Early Childhood*

Presenting Author: **Mitja Nikolaus**

**Mitja Nikolaus:** Aix-Marseille University; **Laurent Prévot:** Aix Marseille université; **Abdellah Fourtassi:** Aix-Marseille University

### T39.4 *Of mouses and mans: the role of production and feedback in language learning*

Presenting Author: **Megan Waller**

**Megan Waller:** Carnegie Mellon University; **Nazbanou Nozari:** Carnegie Mellon University; **Dan Yurovsky:** Carnegie Mellon University

### T39.5 *Quantifying cross-situational statistics during parent-child toy play*

Presenting Author: **Ellis Cain**

**Ellis Cain:** University of California, Merced; **Rachel Ryskin:** University of California, Merced; **Chen Yu:** University of Texas at Austin

### T40.1 *Retention of Exemplar-Specific Information in Learning of Real-World High-Dimensional Categories: Evidence from Modeling of Old-New Item Recognition*

Presenting Author: **Brian Meagher**

**Robert Nosofsky:** Indiana University; **Brian Meagher:** Indiana University

### T40.2 *Effects of Iconicity in Recognition Memory*

Presenting Author: **Dr David M Sidhu**

**David M Sidhu:** Carleton University; **Gabriella Vigliocco:** University College London

### T40.3 *Modeling the effect of chained study in transitive inference*

Presenting Author: **Douglas Markant**

**Douglas Markant:** University of North Carolina at Charlotte

### T40.4 *Mouse-mole-vole: The inconspicuous benefit of phonology during retrieval from semantic memory*

Presenting Author: **Abhilasha A Kumar**

**Abhilasha A Kumar:** Indiana University; **Nancy B Lundin:** Indiana University; **Michael N. Jones:** Indiana University

### T40.5 *Noun phrase representational complexity reduces maintenance cost in working memory by increasing distinctiveness between referents*

Presenting Author: **Chi Dat (Daniel) Lam**

**Chi Dat (Daniel) Lam:** The University of Chicago; **Ming Xiang:** University of Chicago

### T41.1 *Transferring Novel Causal Knowledge*

Presenting Author: **Daniel W Czarnowski**

**Daniel W Czarnowski:** Lehigh University; **Jesseca K. Marsh:** Lehigh University

### T41.2 *Clarifying the Causal Logic of a Classic Control of Variables Task*

Presenting Author: **Elizabeth Lapidow**

**Elizabeth Lapidow:** University of California, San Diego; **Caren M. Walker:** University of California San Diego

### T41.3 *Dissecting causal asymmetries in inductive generalization*

Presenting Author: **Bonan Zhao**

**Zeyu Xia:** University of Edinburgh; **Bonan Zhao:** University of Edinburgh; **Tadeg Quillien:** University of Edinburgh; **Chris Lucas:** University of Edinburgh

### T41.4 *Measuring and Modeling Confidence in Human Causal Judgment*

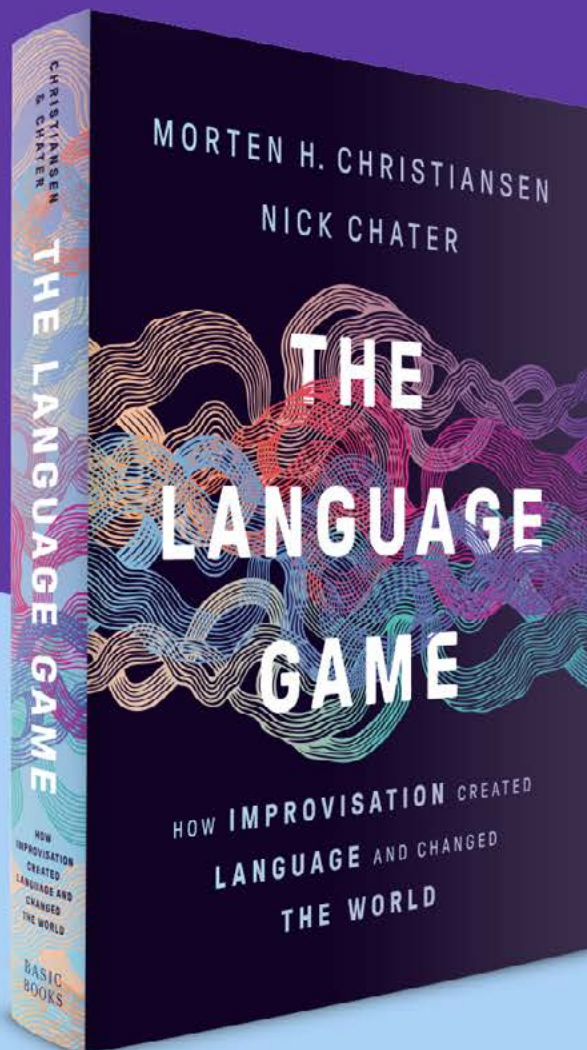
Presenting Author: **Kevin O'Neill**

**Kevin O'Neill:** Duke University; **Paul Henne:** Lake Forest College; **John Pearson:** Duke University; **Felipe DeBrigard:** Duke University

### T41.5 *Evaluations of Causal Claims Reflect a Trade-Off Between Informativeness and Compression*

Presenting Author: **Dr David B Kinney**

**David Kinney:** Princeton University; **Tania Lombrozo:** Princeton University



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## FLASH TALK SESSIONS

### FT1.1 *Learning to count: a neural network model of the successor function*

Presenting Author: **Professor Sashank Varma**

**Vima Gupta:** Georgia Institute of Technology; **Sashank Varma:** Georgia Tech

### FT1.2 *Monster Math Race: Chasing Integrated Number Sense*

Presenting Author: **Dr Lauren Kelly Schiller**

**Lauren Kelly Schiller:** Teachers College, Columbia University; **Robert Siegler:** Teachers College, Columbia University; **Clarissa A Thompson:** Kent State University

### FT1.3 *Training flexible categorization to improve arithmetic problem solving: A school-based intervention with 5th graders*

Presenting Author: **Eric Iacono**

**Eric Iacono:** CY Cergy Paris University; **Hippolyte Gros:** CY Cergy Paris University; **Evelyne Clément:** CY Cergy Paris Université

### FT1.4 *Expanding Understandings of Embodied Mathematical Cognition in Students' Fraction Knowledge*

Presenting Author: **Kelsey E Schenck**

**Kelsey E Schenck:** University of Wisconsin-Madison; **Edward M. Hubbard:** University of Wisconsin-Madison; **Mitchell Nathan:** University of Wisconsin - Madison; **Michael Swart Ph.D.:** University of Wisconsin

### FT1.5 *Understanding mathematical development in preschool children: the association between mathematical language and mathematical abilities*

Presenting Author: **Eylul Turan**

**Eylul Turan:** KU Leuven; **Bert De Smedt:** KU Leuven

### FT1.6 *Race moderates the effect of tactility on children's learning from counting books*

Presenting Author: **Nicole M McNeil**

**W. Trey Cobb:** University of Notre Dame; **Claire Guang:** University of Notre Dame; **Patrick Kirkland:** University of Notre Dame; **Amy Bahadursingh:** University of Notre Dame; **Saachi Kumar:** University of Notre Dame; **Chukwudumebi Stephanie Ona:** University of Notre Dame; **Connor O'Rear:** Purdue University; **Nicole M McNeil:** University of Notre Dame

### FT2.1 *Do people use social information to improve predictions about everyday events?*

Presenting Author: **Stephen Payne**

**Stephen Payne:** Rose-Hulman Institute of Technology; **Alan Jern:** Rose-Hulman Institute of Technology

### FT2.2 *Extraordinary entities: Insights into folk ontology from studies of lay people's beliefs about robots*

Presenting Author: **Kara Weisman**

**Kara Weisman:** University of California, Riverside

### FT2.3 *Exaggeration of Stimulus Attributes in the Representation of Relational Categories*

Presenting Author: **Yuhui Du**

**Yuhui Du:** Ohio State University; **John E. Hummel:** University of Illinois; **Alexander Alexandrov Petrov:** Ohio State University

### FT2.4 *How robust and persistent are intuitive conceptions? Insights from production tasks*

Presenting Author: **Katarina Gvozdic**

**Katarina Gvozdic:** University of Geneva; **Stéphanie Naud:** University of Geneva; **Emmanuel Sander:** University of Geneva

### FT2.5 *Tracing the developmental trajectory of children's relational learning*

Presenting Author: **Apoorva Shivaram**

**Apoorva Shivaram:** Northwestern University; **Elsa Brundige:** Northwestern University; **Lucas Guy:** Washington University in St. Louis; **Susan Hespos:** Northwestern University; **Dedre Gentner:** Northwestern University

### FT2.6 *Teleological essentialism across development*

Presenting Author: **David Rose**

**David Rose:** Stanford; **Sara Jaramillo:** University of Pittsburgh; **Shaun Nichols:** Cornell University; **Zachary Horne:** University of Edinburgh

### FT3.1 *Linguistic aspect constrains event apprehension*

Presenting Author: **Ugurcan Vurgun**

**Ugurcan Vurgun:** University of Pennsylvania; **Yue Ji:** Beijing Institute of Technology; **Anna Papafragou:** University of Pennsylvania

### FT3.2 *Linguistic Encoding of Inferential Evidence for Events*

Presenting Author: **Gökçen Avcılar**

**Gökçen Avcılar:** Özyeğin University; **Ercenur Ünal:** Özyeğin University

### FT3.3 *Neural mechanisms of Event Visibility in sign languages*

Presenting Author: **Julia Krebs**

**Julia Krebs:** University of Salzburg; **Evie Malaia:** University of Alabama ; **Ronnie B Wilbur:** Purdue University; **Dietmar Roehm:** University of Salzburg

### FT3.4 A Closer Look at Bridging Inferences: Onlookers and Framing in Visual Narratives

Presenting Author: **Bien Klomberg**

**Bien Klomberg:** Tilburg University; **Neil Cohn:** Tilburg University

### FT3.5 The Role of Verb-Event Structure in Children's Lexical Ambiguity Resolution

Presenting Author: **Francesco Cabiddu**

**Francesco Cabiddu:** Cardiff University; **Lewis Bott:** Cardiff University; **Gary Jones:** Nottingham Trent University; **Chiara Gambi:** Cardiff University

### FT3.6 Categorizing perceived causal events

Presenting Author: **Nicolas Marchant**

**Nicolas Marchant:** Universidad Adolfo Ibáñez; **Bonan Zhao:** University of Edinburgh; **Neil R Bramley:** University of Edinburgh; **Diego Morales:** Universidad de Talca; **Sergio E. Chaigneau:** Adolfo Ibanez University

### FT4.1 Interference and Case Marker Effects in Dependency Locality: Insights from Hindi

Presenting Author: **Sidharth Ranjan**

**Sidharth Ranjan:** IIT Delhi; **Rajakrishnan Rajkumar:** IISER Bhopal; **Sumeet Agarwal:** IIT Delhi

### FT4.2 Do we all perceive synthetic speech in the same way? Testing congenitally blind versus sighted listeners

Presenting Author: **Gerda Ana Melnik-Leroy**

**Gerda Ana Melnik-Leroy:** Vilnius University; **Gediminas Navickas:** Vilnius University

### FT4.3 Understanding Lightbulb Moments: Meaning-making in visual morphology from comics and emoji

Presenting Author: **Lenneke Doris Lichtenberg**

**Lenneke Doris Lichtenberg:** Tilburg University; **Bien Klomberg:** Tilburg University; **Neil Cohn:** Tilburg University

### FT4.4 Time Alignment between Gaze and Speech in Image Descriptions: Exploring Theories of Linearization

Presenting Author: **Ece Takmaz**

**Ece Takmaz:** University of Amsterdam; **Sandro Pezzelle:** University of Amsterdam; **Raquel Fernandez:** University of Amsterdam

### FT4.5 Enhanced Visual-Linguistic Interaction in Children within the Autism Spectrum: Evidence from the Visual-World Paradigm with Dynamic Scenes

Presenting Author: **Roberto G. de Almeida**

**Deborah Martin:** McGill University; **Roberto G. de Almeida:** Concordia University; **Laura Pissani:** Concordia University; **Jessie Ann Gratton:** Concordia University

### FT4.6 Multimodal integration as predictions. An explanation of the McGurk effect

Presenting Author: **Mr. Marco A. Flores-Coronado**

**Marco A. Flores-Coronado:** Universidad Autónoma del Estado de Morelos; **Alejandra Ciria:** Universidad Nacional Autónoma de México; **Bruno Lara:** Universidad Autónoma del Estado de Morelos

### FT5.1 Reinforcement Learning Agents for Interacting with Humans

Presenting Author: **Ido Shapira**

**Ido Shapira:** Ariel University; **Amos Azaria:** Ariel University

### FT5.2 An Alignment of Standards Enhances Metacognitive Judgment Accuracy in Explanatory Knowledge Tasks with Internet Search

Presenting Author: **Björn Mattes**

**Björn Mattes:** Technische Universität Darmstadt; **Stephanie Pieschl:** Technische Universität Darmstadt

### FT5.3 Including Errors and Errors Correction in a Cognitive User Model

Presenting Author: **Farnaz Tehranchi**

**Farnaz Tehranchi:** The Pennsylvania State University; **Frank E. Ritter:** Pennsylvanian state university

### FT5.4 Supporting Information Processing and One Instant Teaming of Humans and Cyber-Technical Systems by Conceptual Chunking

Presenting Author: **Dr. Anja Klichowicz**

**Anja Klichowicz:** Chemnitz University of Technology; **Dr. Tina Morgenstern:** Chemnitz University of Technology; **Franziska Bocklisch:** Chemnitz University of Technology

### FT5.5 Implementing Riemannian Geometry Based Cognitive Brain Computer Interfaces in Smart Assistive Technologies

Presenting Author: **Mr Prasanna Kolar**

**Prasanna Kolar:** UTSA; **Prasanna Kolar:** University of Texas At San Antonio

### FT5.6 Towards Augmenting Humans in the Field: A Review of Cognitive Enhancement Methods and Applications

Presenting Author: **Dr Alexandre Marois**

**Alexandre Marois:** Thales Research and Technology Canada; **Daniel Lafond:** Thales Research and Technology

### FT6.1 Understanding of differences in verbal and figurative representations by children 4-6 years old.

Presenting Author: **Angelina Ostroverkh**

**Angelina Ostroverkh:** Higher School of Economics; **Alexey Kotov:** Higher School of Economics

## FT6.2 *Paths to Learning in Traditional Artificial Classification Tasks*

Presenting Author: **Keith L Sherman**

**Keith L Sherman:** Binghamton University; **Kenneth Kurtz:** Binghamton University

## FT6.3 *Investigating the impacts of an immersive learning mode and graded feedback on category learning*

Presenting Author: **Alexus S Longo**

**Alexus S Longo:** Binghamton University; **Mercury K Mason:** Binghamton University; **Kenneth Kurtz:** Binghamton University

## FT6.4 *Benefits of active learning for teachers*

Presenting Author: **Oana Stanciu**

**Oana Stanciu:** Central European University; **Jozsef Fiser:** Central European University

## FT6.5 *The impact of categorization rule on categorical visual search*

Presenting Author: **Anastasiia Liashenko**

**Anastasiia Liashenko:** HSE University; **Alexey Kotov:** Higher School of Economics

## FT6.6 *The role of exploration in the development of category learning*

Presenting Author: **Qianqian Wan**

**Qianqian Wan:** Ohio State University; **Mengcun Gao:** The Ohio State University; **Vladimir Sloutsky:** The Ohio State University

## FT7.1 *Causal imprinting in the pandemic: the persistence of the surface-model of Sars CoV2 transmission*

Presenting Author: **Dr Micah Goldwater**

**Micah Goldwater:** University of Sydney

## FT7.2 *Causal versus Associative Relations: Do Humans Perceive and Represent Them Differently?*

Presenting Author: **Icy(Yunyi) Zhang**

**Icy(Yunyi) Zhang:** University of California, Los Angeles; **Shuhao Fu:** UCLA; **Alice(Zhongrui) Xu:** University of California, Los Angeles; **Hongjing Lu:** UCLA

## FT7.3 *Extending the Bayesian Causal Inference of Body Ownership Modell Across Time*

Presenting Author: **M.Sc. Moritz Schubert**

**Moritz Schubert:** Philipps University of Marburg; **Dominik M Endres:** Philipps-Universitaet

## FT7.4 *Cross-Cultural Sensitivity to Context when Reasoning about the Impossible*

Presenting Author: **Dr. Christine Coughlin**

**Christine Coughlin:** University of Texas at Austin; **Jenny Nissel:** University of Texas at Austin; **Kelsey A. Kelley:** The University of Texas at Austin; **Jennifer M Clegg:** Texas State University; **Hui Li:** Central China Normal University; **Jacqueline Woolley:** University of Texas at Austin

## FT7.5 *Patterns of Causal Judgements Diverge from Patterns of Recall: a Test of the Outcome Density Effect*

Presenting Author: **Dr Anna Leshinskaya**

**Eli Stark Elster:** UC Davis; **Anna Leshinskaya:** UC Davis; **Charan Ranganath:** University of California, Davis

## FT7.6 *Children's Recognition of Shared Causal Structure in Mechanical Systems*

Presenting Author: **Alexandra Rett**

**Alexandra Rett:** UC San Diego; **Micah Goldwater:** University of Sydney; **Caren M. Walker:** University of California San Diego

## FT8.1 *Thinking into a machine's mind - Anticipation of an agent's behavior in a cooperative game*

Presenting Author: **Fritz Becker**

**Fritz Becker:** Leibniz-Institut für Wissensmedien; **Juergen Buder:** Leibniz-Institut für Wissensmedien; **Markus Huff:** Leibniz-Institut für Wissensmedien

## FT8.2 *What will they choose? Adults' and children's intuitive predictions of others' numerical decisions*

Presenting Author: **Rahma Mbarki**

**Rahma Mbarki:** Rutgers University-New Brunswick; **Dora Kampis:** University of Copenhagen; **Jinjing (Jenny) Wang:** Rutgers University - New Brunswick

## FT8.3 *Do speakers and listeners remember the speech errors or the repairs in communications?*

Presenting Author: **Nazbanou Nozari**

**Nikhil Vipul Lakhani:** Carnegie Mellon University; **Nazbanou Nozari:** Carnegie Mellon University

## FT8.4 *Frequencies of Metaphorical Expressions in Asperger Syndrome and Typical Development*

Presenting Author: **Josué Elías Benavides Gómez**

**Josué Elías Benavides Gómez:** Escuela Nacional de Antropología e Historia; **Avril Nuche Jannette Nuche Bricaire:** Universidad Nacional Autónoma de México; **Felipe Cruz Pérez:** Universidad Nacional Autónoma de México

### FT8.5 *Young children's reasoning about the epistemic consequences of auditory noise*

Presenting Author: **Aaron Chuey**

**Aaron Chuey:** Stanford University; **Rondeline M. Williams:** Stanford University; **Michael C. Frank:** Stanford University; **Hyowon Gweon:** Stanford University

### FT8.6 *Efficient and Effortful Theory of Mind Reasoning in the AToM Cognitive Model*

Presenting Author: **Irina Rabkina**

**Irina Rabkina:** Occidental College; **Clifton James McFate:** Elemental Cognition

### FT9.1 *The Neural Correlates of the Effect of Belief in Free Will on Third-Party Punishment: An Optical Brain Imaging (fNIRS) Study*

Presenting Author: **Dr. Tuna Çakar Çakar**

**Tuna Çakar Çakar:** MEF University

### FT9.2 *One strike and you're a lout: Perceptions of moral character are fugacious, not tenacious*

Presenting Author: **Joshua Rottman**

**Joshua Rottman:** Franklin and Marshall College; **Emily Foster-Hanson:** Princeton University; **Sam Bellersen:** Franklin & Marshall College

### FT9.3 *Are There Bad Dual Character Concepts?*

Presenting Author: **Dr. Karolina Prochownik**

**Karolina Prochownik:** Ruhr-University Bochum; **Guilherme Almeida:** Yale University

### FT9.4 *What is moral ambiguity and when does it trigger curiosity?*

Presenting Author: **Jordan Wylie**

**Jordan Wylie:** Graduate Center, CUNY; **Ana Gantman:** Brooklyn College

### FT9.5 *The Quantified Moral Self*

Presenting Author: **Dr Zoe A Purcell**

**Zoe A Purcell:** University of Toulouse; **Iyad Rahwan:** Max Planck Institute for Human Development; **JF Bonnefon:** Toulouse School of Economics

### FT9.6 *Perceived Agency Changes Performance and Moral Trust in Robots*

Presenting Author: **Chelsea Frazier-Young**

**Chelsea Frazier-Young:** Active-Duty Military; **Malcolm McCurry:** Arcfield; **Kevin Zish:** Global Systems Technologies; **Greg Trafton:** Naval Research Laboratory

### FT10.1 *Clarifying Metacognition System 1 & 2 with the Common Model*

Presenting Author: **Brendan Conway-Smith**

**Brendan Conway-Smith:** Carleton University; **Robert L West:** Carleton University

### FT10.2 *Modeling the Effect of Learning During Retrieval on Collaborative Inhibition*

Presenting Author: **Willa Mannering**

**Willa Mannering:** Indiana University; **Suparna Rajaram Rajaram:** Stony Brook University; **Richard Shiffrin:** Indiana University; **Michael N. Jones:** Indiana University

### FT10.3 *Metacognition and marking-for-self in theatrical dance as a multimodal pattern of semiotic activity*

Presenting Author: **Henrique Tavares Dias Perissinotto**

**Henrique Tavares Dias Perissinotto:** Federal University of Juiz de Fora; **Joao Queiroz:** Institute of Arts, Federal University of Juiz de Fora

### FT10.4 *Feedback-related and Task-dependent Post-error Slowing*

Presenting Author: **Miss Yiqiong Yang**

**Yiqiong Yang:** University of Cambridge

### FT10.5 *Individual Differences in a Pragmatic Reference Game*

Presenting Author: **Alexandra Mayn**

**Alexandra Mayn:** Saarland University; **Vera Demberg:** Saarland University

### FT10.6 *Vacant*

### FT11.1 *Learning from Failure with Self vs Task Focused Feedback*

Presenting Author: **Sebahat Gok**

**Sebahat Gok:** Indiana University; **Emily R. Fyfe:** Indiana University

### FT11.2 *The Counterintuitive Interpretations Learned from Putatively Intuitive Simulations*

Presenting Author: **Sebahat Gok**

**Sebahat Gok:** Indiana University; **Robert Goldstone:** Indiana University

### FT11.3 *The Impact of Prior Knowledge in Narrative-Based Learning on Understanding Biological Concepts in Higher Education*

Presenting Author: **Samuel Tobler**

**Samuel Tobler:** ETH Zurich; **Tanmay Sinha:** ETH Zurich; **Katja Koehler:** ETH Zurich; **Ernst Hafen:** ETH Zurich; **Manu Kapur:** ETH Zurich

### FT11.4 *Assessment of Mathematical Competence by the Transcriptions of Formulas: An Exploration of Spatial and Temporal Metrics*

Presenting Author: **Peter Cheng**

**Peter Cheng:** University of Sussex; **Grecia Garcia Garcia:** University of Sussex; **Gabrielle Cayton-Hodges:** Educational Testing Service



### FT11.5 Mapping the Structure of Metaphorical Concepts of Undergraduate Research Mentoring

Presenting Author: Kevin J. Holmes

Clarissa Madar: Reed College; Nan Elpers: Reed College; Stephen Flusberg: Purchase College, SUNY; Kevin J. Holmes: Reed College

### FT11.6 Quantifying the relationships between linguistic experience, general cognitive skills and linguistic processing skills

Presenting Author: Florian Hintz

Florian Hintz: Max Planck Institute for Psycholinguistics; Cesko Voeten: Fryske Akademy; James McQueen: Radboud University; Antje Meyer: Max Planck Institute for Psycholinguistics

### FT12.1 Making the Question Under Discussion explicit shifts counterfactual interpretation

Presenting Author: Ebru Evcen

Ebru Evcen: University of California San Diego; Eva Wittenberg: Central European University

### FT12.2 The efficiency of dropping vowels in Romanised Arabic script

Presenting Author: Zeinab Kachakeche

Zeinab Kachakeche: University of California Irvine; Gregory Scontras: UC Irvine; Richard Futrell: UC Irvine

### FT12.3 Intractability of Bayesian belief-updating during communication

Presenting Author: Laura D. van de Braak

Laura D. van de Braak: Radboud University, Donders Institute for Brain, Cognition, and Behaviour; Ronald de Haan: University of Amsterdam; Iris van Rooij: Radboud University; Mark Blokpoel: Donders Institute for Brain, Cognition and Behaviour

### FT12.4 Communicative need modulates lexical precision across semantic domains: A domain-level account of efficient communication

Presenting Author: Laurestine Bradford

Laurestine Bradford: McGill University; Guillaume Thomas: University of Toronto; Yang Xu: University of Toronto

### FT12.5 Quantifying the Emergence of Symbolic Communication

Presenting Author: Emily Cheng

Emily Cheng: MIT; Yen-Ling Kuo: MIT; Josefina Correa: MIT; Boris Katz: MIT; Ignacio Cases: MIT; Andrei Barbu: MIT

### FT12.6 Real-time processing of COVID-19 health messages: Talking about you, us and people

Presenting Author: Elsi Kaiser

Elsi Kaiser: University of Southern California

### FT13.1 Landmark Modality in Wayfinding: Does it Make a Difference?

Presenting Author: Elisa Maria Katharina Arena

Elisa Maria Katharina Arena: Justus Liebig University Giessen; Kai Hamburger: Justus Liebig University Giessen

### FT13.2 Human Information Seeking in Architectural Spaces Simulated in Virtual Reality

Presenting Author: Nikolaos Vlavianos

Nikolaos Vlavianos: Massachusetts Institute of Technology; Takehiko Nagakura: Massachusetts Institute of Technology; Marta Kryven: Massachusetts Institute of Technology

### FT13.3 Convergent and Discriminant Validity of the Direction and Orientation Strategy Questionnaire

Presenting Author: Dr. Heather Burte

Sofia Quintero: Texas A&M University; Heather Burte: Texas A&M University

### FT13.4 What's the relationship between mechanical reasoning and different types of spatial skills?

Presenting Author: Dr. Felipe Munoz-Rubke

Felipe Munoz-Rubke: Universidad Austral de Chile; Zachary Hawes: University of Toronto; Ramon Daniel D. Castillo: University of Talca; Karla Melipillán: Universidad Austral de Chile; Valentina Zamorano: Universidad Austral de Chile; Javier Soto: Universidad Austral de Chile

### FT13.5 Vacant

### FT13.6 Motor-related word association differences in Parkinson Disease for verb processing

Presenting Author: Mr. Marco A. Flores-Coronado

Alma E. Ríos-Ponce: School of Psychology, UNAM; Marco A. Flores-Coronado: Universidad Autónoma del Estado de Morelos; Gabriel Marín-García: School of Psychology, UNAM; Natalia Arias-Trejo: Universidad Nacional Autónoma de México, UNAM

### FT14.1 Conceptual Gender vs. Grammatical Gender: Exploring Implicit and Explicit Object Categorization in Turkish and French Speakers

Presenting Author: Elif Tutku Tunali

Elif Tutku Tunali: Sabanci University; Morgane Jourdain: University of Zurich; Junko Kanero: Sabanci University

### FT14.2 Reverse-engineering the language of thought: a new approach

Presenting Author: Milica Denić

Milica Denić: University of Amsterdam; Jakub Szymanik: University of Amsterdam

### FT14.3 *Hysteresis in training task of Approximate Number System: transfer effect to symbolic math abilities*

Presenting Author: **Nadir Díaz-Simón**

**Nadir Díaz-Simón:** Universidad de la República

### FT14.4 *Rule-Based Categorization: Measuring the Cognitive Costs of Intentional Rule Updating*

Presenting Author: **Marco Ragni**

**Daniel Brand:** Chemnitz University of Technology; **Hannah Dames:** Albert-Ludwigs-Universität Freiburg; **Leonardo Puricelli:** Technische Universität Chemnitz; **Marco Ragni:** TU Chemnitz

### FT14.5 *Category Exceptions Change Category Boundaries*

Presenting Author: **Dr Olivera Savic**

**Olivera Savic:** The Ohio State University; **Vladimir Sloutsky:** The Ohio State University

### FT14.6 *Categorising images by generating natural language rules*

Presenting Author: **Wai Keen Vong**

**Wai Keen Vong:** New York University; **Brenden Lake:** NYU

### FT15.1 *Are children mindful decision makers? Investigating underlying mechanisms of Turkish-learning children's recency bias*

Presenting Author: **Zeynep Adigüzel**

**Zeynep Adigüzel:** Koç University; **Sami Gulgoz:** Koc University; **Tilbe Göksun:** Koç University

### FT15.2 *Exploring cognitive pathways to sustainability – development and validation of personas for sustainable behavior*

Presenting Author: **Laura M. Prislán**

**Laura M. Prislán:** University of Stuttgart; **Maria Wirzberger:** University of Stuttgart

### FT15.3 *Modeling Reward Learning Under Placebo Expectancies: A Q-Learning Approach*

Presenting Author: **Nick Augustat**

**Nick Augustat:** University of Marburg; **Li-Ching Chuang:** Philipps-University of Marburg; **Christian Panitz:** University of Marburg and University of Leipzig; **Christopher Stolz:** Leibniz Institute for Neurobiology; **Erik M. Mueller:** University of Marburg; **Dominik M Endres:** Philipps-Universität

### FT15.4 *Test-retest reliability of task-based measures of voluntary persistence*

Presenting Author: **Yixin Chen**

**Yixin Chen:** Boston University; **Daniel Fulford:** Boston University; **Joseph McGuire:** Boston University

### FT15.5 *A computationally rational analysis of response strategy in a probability learning task*

Presenting Author: **Zeming Fang**

**Zeming Fang:** Rensselaer Polytechnic Institute; **Ru-Yuan Zhang:** Shanghai Jiao Tong University; **Chris R Sims:** Rensselaer Polytechnic Institute

### FT15.6 *A meta-inference model of confidence*

Presenting Author: **Hsin-Hung Li**

**Hsin-Hung Li:** New York University; **Wei Ji Ma:** New York University

### FT16.1 *The Association between Humor Comprehension and Subjective Social Well-being in Non-native English Speakers*

Presenting Author: **Haoyin Xu**

**Haoyin Xu:** University of California, San Diego; **Masaki Nakanishi:** University of California, San Diego; **Seana Coulson:** UC San Diego

### FT16.2 *Non-native English Speakers Are Not Disadvantaged in Humor Appreciation, but Detection, Compared with Native Speakers*

Presenting Author: **Masaki Nakanishi**

**Masaki Nakanishi:** University of California San Diego; **Haoyin Xu:** University of California, San Diego; **Seana Coulson:** UC San Diego

### FT16.3 *Of a Different Persuasion: Perception of Minority Status and Persuasive Impact*

Presenting Author: **Logan Fields**

**Logan Fields:** University of South Florida; **Zaid Marji:** University of South Florida; **John Licato:** University of South Florida

### FT16.4 *Children's accent-based preferences and stereotypes in media contexts*

Presenting Author: **Kathryn Harper**

**Kathryn Harper:** Ryerson University; **Lili Ma:** Ryerson University

### FT16.5 *Semantic priming across speakers and listeners of Latino varieties of English*

Presenting Author: **Alexia Hernandez**

**Alexia Hernandez:** Stanford University; **Meghan Sumner:** Stanford University

### FT16.6 *Joint Content-Context Analysis of Scientific Publications: Identifying Opportunities for Collaboration in Cognitive Science*

Presenting Author: **Lu Cheng**

**Lu Cheng:** University of California, Los Angeles; **Harlin Lee:** UCLA; **Girish Ganesan:** Rutgers University; **William L He:** Northwestern University; **Daniel Silverston:** Brown University; **Jacob G. Foster:** University of California, Los Angeles

### FT17.1 *Multilingual and Bi-dialectal Irony Processing*

Presenting Author: **Kyriakos Antoniou**

**Kyriakos Antoniou:** Cyprus University of Technology



### FT17.2 Can you tell them apart? Using machine learning to classify bilinguals' and multilinguals' cognitive and linguistic performance

Presenting Author: **Dr. M. Paula M. P. Roncaglia-Denissen**  
**M. Paula M. P. Roncaglia-Denissen:** Tilburg University; **Diana Chernichenko:** Tilburg University; **Eriko Fukuda:** Tilburg University; **Peter H. G. Hendrix:** Tilburg University

### FT17.3 Task-Based and Individual Differences Influence the Effect of Gesture Observation on Novel L2 Speech Sound Learning

Presenting Author: **Dr. Laura M. Morett**  
**Laura M. Morett:** University of Alabama

### FT17.4 Data-driven Crosslinguistic Syntactic Transfer in Second Language Learning

Presenting Author: **Zoey Liu**  
**Zoey Liu:** Boston College; **Tiwalayo Eisape:** Massachusetts Institute of Technology; **Emily Prud'hommeaux:** Boston College; **Joshua K Hartshorne:** Boston College

### FT17.5 Deep in the Trenches: First language performance predicts primacy in statistical learning of two structures

Presenting Author: **Jino Chough**  
**Jino Chough:** Swarthmore College; **Benjamin D. Zinszer:** Swarthmore College

### FT17.6 Language Experience Modulates L2-Related Representational Change when Learning Novel Categories

Presenting Author: **John D. Patterson**  
**John D. Patterson:** The Pennsylvania State University; **Nicci C Schoedel:** Pennsylvania State University; **Elisabeth A. Karuza:** The Pennsylvania State University

### FT18.1 Toward Automated Detection of Phase Changes in Team Collaboration

Presenting Author: **Julie Harrison**  
**Julie Harrison:** Georgia Institute of Technology; **Sona Anita Jain:** Georgia Institute of Technology; **Terri Dunbar:** Georgia Institute of Technology; **Jamie Gorman:** Georgia Institute of Technology; **Sashank Varma:** Georgia Tech

### FT18.2 The Costs and Composition of Discontinuity in Visual Narratives

Presenting Author: **Bien Klomberg**  
**Bien Klomberg:** Tilburg University; **Neil Cohn:** Tilburg University

### FT18.3 Altercentric interference vs. bias in 7.5 month-old infants: a pupillometry study

Presenting Author: **Velisar Manea**  
**Velisar Manea:** University of Copenhagen; **Dimitrios Askitis:** University of Copenhagen; **Emanuela Yeung:** University of Copenhagen; **Victoria Southgate:** Copenhagen University

### FT18.4 Infant Action Prediction of Everyday Food Preparation

Presenting Author: **Claire Monroy**  
**Claire Monroy:** Keele University; **Sara E Schroer:** UT Austin; **Mary Hayhoe:** University of Texas; **Chen Yu:** University of Texas at Austin

### FT18.5 Predicting Domain Knowledge Using Natural Language Processing Tools

Presenting Author: **Daniel Feller**  
**Daniel Feller:** Georgia State University; **Joe P Magliano Magliano:** Georgia State University; **Minkyung Kim:** Nagoya University of Commerce and Business

### FT18.6 Learning variations in children's multimodal cues of uncertainty during a math-related numerical discrimination task

Presenting Author: **Theresa Eunhye Choi**  
**Theresa Eunhye Choi:** University of Pittsburgh; **Rahma Mbarki:** Rutgers University-New Brunswick; **Grace Grmek:** Rutgers University; **Kimele Persaud:** Rutgers University - Newark; **Jinjing (Jenny) Wang:** Rutgers University - New Brunswick; **Malihe Alikhani:** UPitt

### FT19.1 Learning Unnatural Language Quantifiers

Presenting Author: **Semih Can Aktepe**  
**Semih Can Aktepe:** Middle East Technical University; **Barbaros Yet:** Middle East Technical University

### FT19.2 Look For Adjectives In the Face: How Facial Expressions Contribute To Meaning In Signed Languages

Presenting Author: **Carla Viegas**  
**Carla Viegas:** Language Technologies Institute; **Lorna C Quandt:** Gallaudet University; **Malihe Alikhani:** UPitt

### FT19.3 Gender bias in grammatical gender systems across languages

Presenting Author: **Sonali Dey**  
**Sonali Dey:** University of Toronto; **Yang Xu:** University of Toronto

### FT19.4 Measuring Meaning: Alignment and Misalignment Across Indices of Verb Semantics

Presenting Author: **Lilia Rissman**  
**Lilia Rissman:** University of Wisconsin - Madison

### FT19.5 *The effects of prediction in conversational alignment*

Presenting Author: **Emilia Kerr**

**Emilia Kerr:** Aix-Marseille University; **Kristof Strijkers:** CNRS & Aix-Marseille University

### FT19.6 *Schematic Diagrams and Semantic Processing of English Prepositional Polysemy*

Presenting Author: **Menghan Wang**

**Menghan Wang:** The University of Melbourne; **Helen Zhao:** University of Melbourne

### FT20.1 *Can Social Relations Influence Cooperation in Prisoner's Dilemma?*

Presenting Author: **PhD Evgeniya Hristova**

**Maurice Grinberg:** New Bulgarian University; **Evgeniya Hristova:** New Bulgarian University; **Desislava Chakarova:** New Bulgarian University

### FT20.2 *Improving the Perception of Fairness in Shapley-Based Allocations*

Presenting Author: **Meir Nizri**

**Meir Nizri:** Ariel University; **Amos Azaria:** Ariel University; **Noam Hazon:** Ariel University

### FT20.3 *Does linguistic alignment promote cooperation?*

Presenting Author: **Theresa Matzinger**

**Theresa Matzinger:** University of Vienna; **Marek Placiński:** Nicolaus Copernicus University in Toruń; **Adam Gutowski:** Nicolaus Copernicus University in Toruń; **Mariusz Lewandowski:** Nicolaus Copernicus University; **Przemysław Zywczyński:** Nicolaus Copernicus University; **Sławomir Waciewicz:** Nicolaus Copernicus University

### FT20.4 *Social Dynamics of Division-of-Labor Tasks*

Presenting Author: **Megan Chiovaro**

**Megan Chiovaro:** University of Connecticut; **Alexandra Paxton:** University of Connecticut

### FT20.5 *How Virtual Work Environments Convey Perceptual Cues to Foster Shared Intentionality During Covid-19 for Blind and Partially Sighted Employees*

Presenting Author: **Erin Lee**

**Erin Lee:** OCAD University; **Canadian National Institute for the Blind:** Canadian National Institute for the Blind; **Peter Coppin:** OCAD University

### FT20.6 *Proto-trust and trust attribution: a theory of intuitive, affective forms of trust and the means by which trust decisions are made*

Presenting Author: **Miss Lauren E Fell**

**Lauren E Fell:** Queensland University of Technology; **Peter Bruza:** Queensland University of Technology

### FT21.1 *A task-general model of human randomization*

Presenting Author: **Sami R Yousif**

**Sami R Yousif:** Yale University; **Samuel David McDougale:** Yale University; **Robb B Rutledge:** Yale University

### FT21.2 *The Discrete, the Continuous, and the Approximate Number System*

Presenting Author: **Dr Jean-Charles Pelland**

**Jean-Charles Pelland:** University of Bergen

### FT21.3 *Left to the Reader: Abstracting Solutions in Mathematical Reasoning*

Presenting Author: **Gabriel Poesia Reis e Silva**

**Gabriel Poesia Reis e Silva:** Stanford University; **Noah Goodman:** Stanford University

### FT21.4 *Neighborhood effects for composite (i.e., non-prime) numbers*

Presenting Author: **Jeffrey K. Bye**

**Jeffrey K. Bye:** University of Minnesota; **Rina Harsch:** University of Minnesota; **Sashank Varma:** Georgia Tech

### FT21.5 *Why do People fit to Benford's Law? – A Test of the Recognition Hypothesis*

Presenting Author: **Bruce Burns**

**Duyi Chi:** The University of Sydney; **Bruce Burns:** The University of Sydney

### FT21.6 *How can visual perception of numbers affect computational fluency?*

Presenting Author: **Maiko Takahashi**

**Maiko Takahashi:** the University of Tokyo; **Souko Inoue:** MITA International School

### FT22.1 *Vacant*

### FT22.2 *Exploring Empathy and a Range of Emotions Towards Protest Photographs*

Presenting Author: **Rahul Sajnani**

**Aadil Mehdi Sanchawala:** Columbia University; **Adhithya Arun:** International Institute of Information Technology, Hyderabad; **Rahul Sajnani:** International Institute of Information Technology; **Rohan Chacko:** IIIT Hyderabad ; **Kavita Vemuri:** International Institute of Information Technology - Hyderabad

### FT22.3 *The relationship between individual differences in mental imagery vividness and emotional distress*

Presenting Author: **Aaron Necaie**

**Aaron Necaie:** University of Central Florida; **Daniel S McConnell:** University of Central Florida; **Mary Jean Amon:** University of Central Florida

#### FT22.4 *Visual attention to threat in the Himba, a remote people of Namibia*

Presenting Author: **Dr. Anna Blumenthal**

**Anna Blumenthal:** University Laval; **Serge Caparos:** Université Paris 8; **Isabelle Blanchette:** Université Laval

#### FT22.5 *The emotional value in objects: Insights from coping with the COVID-19 pandemic*

Presenting Author: **Keiana Price**

**Keiana Price:** University of North Carolina Greensboro; **Madison L Pesowski:** University of California, San Diego; **Shaylene E Nancekivell:** University of North Carolina at Greensboro

#### FT22.6 *How long are real-life events?*

Presenting Author: **Viviana Sastre Gomez**

**Luz Viviana Sastre:** The University of Melbourne; **Jeffrey M. Zacks:** Washington University in Saint Louis; **Simon Dennis:** The University of Melbourne

#### FT23.1 *Evaluating Language Representation Models on Approximately Rational Decision Making Problems*

Presenting Author: **Dr. Mayank Kejriwal**

**Mayank Kejriwal:** University of Southern California; **Zhisheng Tang:** University of Southern California

#### FT23.2 *Interpreting Logical Metonymy through Dense Paraphrasing*

Presenting Author: **Bingyang Ye**

**Bingyang Ye:** Brandeis University; **Jingxuan Tu:** Brandeis University; **Elisabetta Jezek:** University of Pavia; **James Pustejovsky:** Brandeis University

#### FT23.3 *Limits and risks of GPT-3 applications*

Presenting Author: **Eric Schwitzgebel**

**Anna Strasser:** Ludwig-Maximilians-Universität; **Matthew Crosby:** DeepMind; **Eric Schwitzgebel:** University of California, Riverside

#### FT23.4 *Attention Is Not Enough*

Presenting Author: **Dr. Joshua L Phillips**

**Joshua Miller:** University of Tennessee, Knoxville; **Shawheen Naderi:** California State University, Sacramento; **Channing Mullinax:** Middle Tennessee State University; **Joshua L Phillips:** Middle Tennessee State University

#### FT23.5 *Human-like property induction is a challenge for large language models*

Presenting Author: **Simon Jerome Han**

**Simon Jerome Han:** University of Melbourne; **Keith James Ransom:** University of Melbourne; **Andrew Perfors:** University of Melbourne; **Charles Kemp:** University of Melbourne

#### FT23.6 *Analyzing Reliability of Interpretable Parameters in Deep Learning Language Models*

Presenting Author: **Yo Ehara**

**Yo Ehara:** Tokyo Gakuji University

#### FT24.1 *Cognitive diversity promotes collective creativity: an agent-based simulation*

Presenting Author: **Kristian Tylen**

**Roberta Rocca:** University of Texas at Austin; **Kristian Tylen:** Aarhus University

#### FT24.2 *An investigation of the cognitive and neural correlates of semantic memory search related to creative ability*

Presenting Author: **Ms Marcela Ovando Tellez**

**Marcela Ovando Tellez:** Paris Brain Institute, Sorbonne university; **Mathias Benedek:** University of Graz; **Yoed Kenett:** Technion - Israel Institute of Technology; **Thomas Hills:** University of Warwick; **Sarah Bouanane:** Paris Brain Institute, Sorbonne university; **Matthieu Bernard:** Paris Brain Institute, Sorbonne university; **Joan Belo:** Paris Brain Institute, Sorbonne university; **Théophile Bieth:** Paris Brain Institute, Sorbonne university; **Emmanuelle Volle:** Paris Brain Institute, Sorbonne university

#### FT24.3 *Using a Language Transformer Model to Capture Creativity in Improvised Narratives*

Presenting Author: **Qingzhi Ruby Zeng**

**Qingzhi Ruby Zeng:** University of Rochester; **Derek Lilienthal:** California State University, Monterey Bay; **Marius Cătălin Iordan:** Princeton University; **Elise A. Piazza:** University of Rochester

#### FT24.4 *"A fork is a food stabber": Linguistic creativity in English L1 and L2 speakers*

Presenting Author: **Stephen Skalicky**

**Stephen Skalicky:** Victoria University of Wellington; **Nancy Bell:** Washington State University; **Mihai Dascalu:** University Politehnica of Bucharest; **Scott Crossley:** Georgia State University

#### FT24.5 *Dynamics of Interaction with the Environment in Creativity: Embodied Imagination Framework*

Presenting Author: **Daichi Shimizu**

**Daichi Shimizu:** Graduate School of Human Development and Environment; **Takeshi Okada:** The University of Tokyo

#### FT24.6 *Play as intuitive modelling for fostering creativity in interaction*

Presenting Author: **Taijun Cheng**

**Taijun Cheng:** Japan Advanced Institute of Science and Technology; **Guanhong Li:** Japan Advanced Institute of Science and Technology; **Takashi Hashimoto:** Japan Advanced Institute of Science and Technology

#### FT25.1 *Effect of self-experience on empathic helping to virtual agents*

Presenting Author: **Junya Morita**

**Junya Morita:** Shizuoka University; **Yuna Kano:** Shizuoka University

### FT25.2 *People learn other's preferences on a latent feature space using emotion expressions as labels*

Presenting Author: **Junya Yamada**

**Junya Yamada:** Gifu University; **Souichiro Yoshikawa:** Gifu University; **Hirokazu Kumazaki:** Nagasaki University; **Hideki Kozima:** Tohoku University; **Kazunori Terada:** Gifu University

### FT25.3 *Intentional commitment through an internalized theory of mind: Acting in the eyes of an imagined observer*

Presenting Author: **Shaozhe Cheng**

**Shaozhe Cheng:** Zhejiang University; **Minglu Zhao:** University of California - Los Angeles; **Jingyin Zhu:** Zhejiang University; **Jifan Zhou:** Zhejiang University; **Mowei Shen:** Zhejiang University; **Tao Gao:** UCLA

### FT25.4 *Explicit and Implicit Coordination of Joint Action*

Presenting Author: **Chen Zheng**

**Chen Zheng:** Teachers College, Columbia University; **Barbara Tversky:** Columbia Teachers College

### FT25.5 *What Is the point? a Theory of Mind Model of Relevance*

Presenting Author: **Kaiwen Jiang**

**Kaiwen Jiang:** University of California, Los Angeles; **Stephanie Stacy:** University of California - Los Angeles; **Annya L. Dahmani:** University of California - Los Angeles; **Boxuan Jiang:** University of California, Los Angeles; **Federico Rossano:** University of California, San Diego; **Yixin Zhu:** UCLA; **Tao Gao:** UCLA

### FT25.6 *Conflict between self and other in the development of perspective tracking*

Presenting Author: **Emanuela Yeung**

**Emanuela Yeung:** University of Copenhagen; **Dimitrios Askitis:** University of Copenhagen; **Velisar Manea:** University of Copenhagen; **Victoria Southgate:** Copenhagen University

### FT26.1 *Do Judgments of Learning Improve Inductive Learning?*

Presenting Author: **Hyorim Ha**

**Hyorim Ha:** Yonsei University; **Hee Seung Lee:** Yonsei University

### FT26.2 *Does delayed interim testing enhance subsequent learning?*

Presenting Author: **Yewon Kang**

**Yewon Kang:** Yonsei University; **Hee Seung Lee:** Yonsei University

### FT26.3 *One-second Boosting: A Simple and Cost-effective Intervention that Promotes the Optimal Allocation of Cognitive Resources*

Presenting Author: **Rina Kagawa**

**Rina Kagawa:** University of Tsukuba; **Masaru Shirasuna:** Otemon Gakuin University; **Atsushi Ikeda:** University of Tsukuba; **Masaru Sanuki:** University of Tsukuba; **Hidehito Honda:** Otemon Gakuin University; **Hirokazu Nosato:** National Institute of Advanced Industrial Science and Technology (AIST)

### FT26.4 *Transitive inference in non-humans? Not so fast!*

Presenting Author: **Steven Phillips**

**Steven Phillips:** National Institute of Advanced Industrial Science and Technology

### FT26.5 *Modeling aberrant volatility estimates in Autism Spectrum Disorder*

Presenting Author: **M.Sc. Hauke Niehaus**

**Hauke Niehaus:** University Marburg; **Sanna Stroth:** Philipps University Marburg; **Inge Kamp-Becker:** Philipps University Marburg; **Dominik M Endres:** Philipps-Universitaet

### FT26.6 *Restructuring problem-related semantic associations promotes solving success*

Presenting Author: **Théophile Bieth**

**Théophile Bieth:** Paris Brain Institute, Sorbonne university; **Yoed Kenett:** Technion - Israel Institute of Technology; **Marcela Ovando Tellez:** Paris Brain Institute, Sorbonne university; **Celia Lacaux:** Paris Brain Institute, Sorbonne university; **Delphine Oudiette:** Paris Brain Institute, Sorbonne university; **Emmanuelle Volle:** Paris Brain Institute, Sorbonne university

### FT27.1 *Events and Objects Are Similar Cognitive Entities*

Presenting Author: **Yue Ji**

**Yue Ji:** Beijing Institute of Technology; **Anna Papafragou:** University of Pennsylvania

### FT27.2 *Viewers Spontaneously Represent Event Temporal Structure*

Presenting Author: **Yue Ji**

**Yue Ji:** Beijing Institute of Technology; **Anna Papafragou:** University of Pennsylvania

### FT27.3 *Context-based Prediction Error Updating of Memory Representations is Modulated by Event Boundaries*

Presenting Author: **Rujuta Pradhan**

**Rujuta Pradhan:** Indian Institute of Technology, Kanpur; **Devpriya Kumar:** Indian Institute of Technology Kanpur



### FT27.4 Motion Event Segmentation in Visual Narratives

Presenting Author: Irmak Hacımusaoğlu

Irmak Hacımusaoğlu: Tilburg University; Neil Cohn: Tilburg University

### FT27.5 The Source-Goal Asymmetry in Motion Events: Sources Are Robustly Encoded in Memory but Overlooked at Test

Presenting Author: Yiran Chen

Yiran Chen: University of Pennsylvania; John Trueswell: University of Pennsylvania; Anna Papafragou: University of Pennsylvania

### FT27.6 Hierarchical task knowledge constrains and simplifies action understanding

Presenting Author: Isaac Davis

Isaac Davis: Yale University; Julian Jara-Ettinger: Yale University

### FT28.1 How 'Good-Enough' is L2 Sentence Comprehension? Evidence from Suffixal Passive Construction in Korean

Presenting Author: Dr. Gyu-Ho Shin

Chanyoung Lee: Yonsei University; Gyu-Ho Shin: Palacký University Olomouc; Boo Kyung Jung: University of Pittsburgh

### FT28.2 Perception of a phoneme contrast in Singaporean English-Mandarin bilingual adults: A preregistered study of individual differences

Presenting Author: Ms Hannah L. Goh

Hannah L. Goh: Nanyang Technological University; Suzy J. Styles: Nanyang Technological University

### FT28.3 Chinese Dialect Proficiency and Executive Function: Evidence from the Simon Task

Presenting Author: Adam John Privitera

Adam John Privitera: Wenzhou-Kean University; Yu Zhou: Wenzhou-Kean University

### FT28.4 Bilingualism protects social cognition in aging: Effects of early bilingualism on older adult theory of mind

Presenting Author: Xiaoqian Li

Xiaoqian Li: Singapore University of Technology and Design; W. Quin Yow: Singapore University of Technology and Design

### FT28.5 UK bilingual toddlers show a lag in vocabulary size relative to monolinguals in both comprehension and production

Presenting Author: Serene Siow

Serene Siow: University of Oxford; Irina Lepadatu: University of Oxford; Nicola Gillen: University of Oxford; Kim Plunkett: University of Oxford

### FT28.6 Functional Connectivity Differences between Trilinguals and Bilinguals: The Role of Orthographic Depth

Presenting Author: Ye Shen

Ye Shen: University of Delaware; Stephanie Del Tufo: University of Delaware

### FT29.1 Studying the long-term dynamics of reciprocity based on welfare tradeoff ratios

Presenting Author: Wenhao Qi

Wenhao Qi: University of California, San Diego; Ed Vul: University of California, San Diego

### FT29.2 Perspective taking and reference frames for spatial and social cognition

Presenting Author: Sungjoon Park

Sungjoon Park: Texas A&M University; Brandon K Watanabe: Texas A&M University; Heather Burte: Texas A&M University

### FT29.3 Children, but not adults, prioritize relational over dispositional interpretations of dominance interactions

Presenting Author: Barbara Pomiechowska

Barbara Pomiechowska: Central European University; Denis Tatone: Central European University; Dorottya Meszegeto: Central European University; Barbu Revencu: Central European University; Gergely Csibra: Central European University

### FT29.4 Do humans recalibrate the confidence of advisers or take their confidence at face value?

Presenting Author: Oana Stanciu

Oana Stanciu: Central European University; Jozsef Fiser: Central European University

### FT29.5 Understanding and Modeling Coordination in the Minimum Effort Game

Presenting Author: Alexander Hough

Alexander Hough: Air Force Research Lab; Ion Juvina: Wright State University

### FT29.6 Transcultural mindreading: Building a new database of Facial Expressions with actors of diverse ethnicities to assess social cognition.

Presenting Author: Dr. Fernanda Pérez-Gay Juárez

Fernanda Pérez-Gay Juárez: McGill University; Olivia Leone: McGill University; Elizaveta Solomonova: McGill University; Ian Gold: McGill University

### FT30.1 *A Study on Relative Performance of an Reinforcement Learning Agent and Human in a Psychometric Assessment Game*

Presenting Author: **Utanko Mitra**

**Utanko Mitra:** Indian Institute of Technology, Kharagpur; **Shivam Raj:** Indian Institute of Technology; **Anirban Lahiri:** Arndit Ltd.; **Sunreeta Sen:** Arndit Ltd.; **Rajlakshmi Guha:** Indian Institute of Technology; **Pabitra Mitra:** Indian Institute of Technology

### FT30.2 *Achieving Consensus to Learn an Efficient and Robust Communication via Reinforcement Learning*

Presenting Author: **Wei Qing**

**Wei Qing:** Beijing University of Posts and Telecommunications; **Zhaofeng He:** Beijing University of Posts and Telecommunications; **Junge Zhang:** Institute of Automation Chinese Academy of Sciences; **Jian Li:** Beijing University of Posts and Telecommunications; **Luzhan Yuan:** Beijing University of Posts and Telecommunications; **Wei Wang:** Beijing University of Posts and Telecommunications

### FT30.3 *Criticality-Based Advice in Reinforcement Learning*

Presenting Author: **Mr. Yitzhak Spielberg**

**Yitzhak Spielberg:** Ariel University; **Amos Azaria:** Ariel University

### FT30.4 *Socially emotional intelligent agents based on BICA and deep learning*

Presenting Author: **Alexei V Samsonovich**

**Alexei V Samsonovich:** National Research Nuclear University "MEPhI"

### FT30.5 *How Feedback in Interactive Activation Improves Perception*

Presenting Author: **James Magnuson**

**James Magnuson:** University of Connecticut; **Samantha Grubb:** University of Connecticut; **Anne Marie Crinnion:** University of Connecticut; **Sahil Luthra:** Carnegie Mellon University; **Phoebe Gaston:** University of Connecticut

### FT30.6 *Comparing Machine and Human Learning in a Planning Task of Intermediate Complexity*

Presenting Author: **Zheyang (Sam) Zheng**

**Zheyang (Sam) Zheng:** New York University; **Xinlei (Daisy) Lin:** NYU; **Jake Topping:** University of Oxford; **Wei Ji Ma:** New York University

### FT31.1 *Our construal and bodily actions are impacted by changes in language and virtual viewpoints*

Presenting Author: **Chie Fukada**

**Chie Fukada:** Kyoto Institute of Technology; **Yukiko Nishizaki:** Kyoto Institute of Technology; **Kaishi Sasaki:** Kyoto Institute of Technology; **Noriyuki Kida:** Kyoto Institute of Technology

### FT31.2 *Where would you stand on the subway? A Bayesian framework for modeling commuter positioning choices in simulated subway coaches*

Presenting Author: **Mr Rohit Priyadarshi Sanatani**

**Rohit Priyadarshi Sanatani:** Massachusetts Institute of Technology

### FT31.3 *When Newton beats Euclid: intuitive physics underlies sensitivity to geometry*

Presenting Author: **Dr. Sarah Placi**

**Sarah Placi:** Center for Mind/Brain Sciences

### FT31.4 *An Account of Interoceptive Affordances*

Presenting Author: **Daniel Kosacz**

**Daniel Kosacz:** Western Michigan University

### FT31.5 *Intercultural enactive ethics: an approach from science and technology understood as enactive practices*

Presenting Author: **Ms. Melina Gastelum Vargas**

**Melina Gastelum Vargas:** UNAM

### FT31.6 *How heavy do you think you are? Self-weight estimation is modulated by body dissatisfaction and weight concerns.*

Presenting Author: **Verónica Ramenzoni**

**Sofia Abrevaya:** National Scientific and Technical Research Council; **Lola Kaplanski:** Instituto de Neurociencia Cognitiva y Traslacional (Consejo Nacional de Investigaciones Científicas y Técnicas; **Trinidad Belén Speranza:** National Scientific and Technical Research Council; **Verónica Ramenzoni:** National Scientific and Technological Council of Argentina

### FT32.1 *Does word boundary information facilitate Chinese sentence reading in children as beginning readers?*

Presenting Author: **Weiyan Liao**

**Weiyan Liao:** University of Hong Kong; **Wing Chi Chong:** University of Hong Kong; **Janet Hsiao:** University of Hong Kong

### FT32.2 *The role of reading test strategy in reading comprehension: An eye-movement study*

Presenting Author: **Jocelyn Ching Yan Kwok**

**Jocelyn Ching Yan Kwok:** The University of Hong Kong; **Janet Hsiao:** University of Hong Kong

### FT32.3 *Modeling Fixation Behavior in Reading with Character-level Neural Attention*

Presenting Author: **Michael Hahn**

**Songpeng Yan:** School of Informatics; **Michael Hahn:** Stanford University; **Frank Keller:** University of Edinburgh



### FT32.4 Automated generation of sentence reading fluency test items

Presenting Author: **Julia White**

**Julia White:** Stanford University; **Amy Burkhardt:** Stanford University; **Jason Yeatman:** Stanford University; **Noah Goodman:** Stanford University

### FT32.5 The Impact of Dyslexia Awareness Month on Search Volume Using GoogleTrends

Presenting Author: **Kelly Nisbet**

**Kelly Nisbet:** University of Alberta; **Dania Awartani:** University of Alberta; **Beyza Kandemir:** University of Alberta; **Sarah Sweneya:** University of Alberta; **Kate Richards:** University of Alberta; **Jacqueline Cummine:** University of Alberta

### FT32.6 Dyslexia and Motor Skills: A Meta-Analysis

Presenting Author: **Dr. Rita Obeid**

**Rita Obeid:** Case Western Reserve University; **Catherine M Messina:** Columbia University; **Nicole Zapparrata:** College of Staten Island; **Christopher Donnan Gravelle:** College of Staten Island, CUNY; **Patricia J. Brooks:** College of Staten Island and the Graduate Center, CUNY

### FT33.1 How scene attributes and sound influence visual exploration of omnidirectional panoramic scenes

Presenting Author: **Halit Ozsoy**

**Halit Ozsoy:** Bogazici University; **Mert Cokelek:** Koc University; **Inci Ayhan:** Bogazici University; **Erkut Erdem:** Hacettepe University; **Aykut Erdem:** Koc University

### FT33.2 Multiple-Object Search in Cluttered Scenes

Presenting Author: **Elizabeth Brogna**

**Elizabeth Brogna:** New Jersey Institute of Technology; **Sophie Jedrysek:** New Jersey Institute of Technology; **Yelda Semizer:** New Jersey Institute of Technology

### FT33.3 Differential patterns of object-location binding in children and adults: Pruning the special role of location

Presenting Author: **Mengcun Gao**

**Mengcun Gao:** The Ohio State University; **Maurryce Starks:** The University of North Carolina at Chapel Hill; **Julie Golomb:** the Ohio State University; **Vladimir Sloutsky:** The Ohio State University

### FT33.4 Curvature Effect on Aesthetic perception

Presenting Author: **c.PhD Esin Tuna Demircioglu**

**Esin Tuna Demircioglu:** Yeditepe University; **Tuna Çakar Çakar:** MEF University; **Yener Girişken:** Marketing

### FT33.5 Perception of liquids relies on generalizable, physics-based representations

Presenting Author: **Yuting Zhang**

**Yuting Zhang:** Yale University; **Wenyan Bi:** Yale University; **Ilker Yildirim:** Yale University

### FT33.6 Semantic Congruence Across Sensory Modalities

Presenting Author: **Dr. Susan Geffen**

**Susan Geffen:** Occidental College; **Taylor Beck:** Occidental College; **Sheroz Faisal:** Ohio State University; **Newark;** **Chris Robinson:** The Ohio State University

### FT34.1 Clickbait's Impact on Visual Attention – An Eye Tracker Study

Presenting Author: **Vivek Kaushal**

**Vivek Kaushal:** International Institute of Information Technology, Hyderabad; **Sawar Sagwal:** International Institute of Information Technology - Hyderabad; **Kavita Vemuri:** International Institute of Information Technology - Hyderabad

### FT34.2 Performance incentives enhance alerting, orienting, and executive attentional processes

Presenting Author: **Christopher Bravo**

**Christopher Bravo:** Brown University; **Harrison Ritz:** Brown University

### FT34.3 Predictors of Incidental and Intentional Learning: Curiosity, Construal Level, and Musical Arousal

Presenting Author: **Firuze E Mullaoglu**

**Firuze E Mullaoglu:** Ruhr University Bochum; **Nursena Armağan:** Albert Ludwigs Freiburg University; **Gülten Ünal:** Ankara Yıldırım Beyazıt University

### FT34.4 Posttraumatic stress disorder and differences in eye gaze during a visual search task with cognitive load

Presenting Author: **Heather Roy**

**Heather Roy:** DEVCOM; **Leah R Enders:** DCS Corp; **Thomas Rohaly:** Army Research Laboratory; **Bianca Dalangin:** DCS Corp; **Jessica Villarreal:** DCS Corp; **Angela Jeter:** DCS Corp

### FT34.5 Effortful Control of Attention and Executive Function in Preschool Children

Presenting Author: **Aditi Deodhar**

**Aditi Deodhar:** Riley Hospital for Children at IU Health, IU School of Medicine; **Bennett I. Bertenthal:** Indiana University

### FT34.6 Impulsivity, risk-taking, and loss aversion in a continuous response task

Presenting Author: **Anderson Fitch**

**Anderson Fitch:** University of Florida; **Seung-Wook Cho:** University of Florida; **Peter Kvam:** University of Florida

### FT35.1 Aligning Language and Memory Accounts of Semantic Interference

Presenting Author: **Channing E Hambric**

**Channing E Hambric:** Lehigh University; **Padraig O'Seaghda:** Lehigh University

### FT35.2 *Does Being an Expert Matter? The Influence of Source Expertise on Recognition Memory*

Presenting Author: **Rina Miyata Harsch**

**Rina Harsch**: University of Minnesota; **Panayiota Kendeou**: University of Minnesota

### FT35.3 *Uninvited and unwanted: False memories for words predicted but not seen*

Presenting Author: **Katja Haeuser**

**Katja Haeuser**: Saarland University; **Jutta Kray**: Saarland University

### FT35.4 *Effect of stimuli congruency on gaze behavior and memory*

Presenting Author: **Vivienne Kraeter**

**Vivienne Kraeter**: Tilburg University; **Veronika Kritskaia**: Tilburg University; **Travis J. Wiltshire**: Tilburg University; **Silvy H.P. Collin**: Tilburg University

### FT35.5 *How Increasing Item and Cue Duration Influence Item-Method Directed Forgetting*

Presenting Author: **Pelin Tanberg**

**Pelin Tanberg**: University of Waterloo; **Colin M. MacLeod**: University of Waterloo; **Myra A. Fernandes**: University of Waterloo; **William E Hockley**: Wilfrid Laurier University

### FT35.6 *Intentional Forgetting of Habits? Combining List-Method Directed Forgetting and Item-Specific Stimulus-Response Priming*

Presenting Author: **Hannah Dames**

**Hannah Dames**: University of Zurich; **Andrea Kiesel**: University of Freiburg; **Christina U. Pfeuffer**: Catholic University of Eichstätt-Ingolstadt; **Marco Ragni**: TU Chemnitz

### FT36.1 *How children talk about their desires: A corpus study of 'want'*

Presenting Author: **Sangeet Khemlani**

**Hillary Harner**: Altamira Corporation; **Sangeet Khemlani**: Naval Research Laboratory

### FT36.2 *Intolerant Data: Testing The Tolerance Principle*

Presenting Author: **Xiaomeng Ma**

**Xiaomeng Ma**: Graduate Center, City University of New York; **Martin Chodorow**: Hunter College and the Graduate Center of CUNY; **Virginia Valian**: Hunter College

### FT36.3 *How Do Children Combine Pointing and Language in the Earliest Stages of Development? A Case Study of Russian and Chintang*

Presenting Author: **Jekaterina Mazara**

**Jekaterina Mazara**: University of Zurich; **elena veronica maria lieven**: University of Manchester; **Sabine Stoll**: University of Zurich

### FT36.4 *The link between language and cognition in infancy*

Presenting Author: **Apoorva Shivaram**

**Apoorva Shivaram**: Northwestern University; **Mary Youkhanna**: Western Sydney University; **Marieke van Heugten**: Western Sydney University; **Susan Hespos**: Northwestern University

### FT36.5 *How to Build a Toddler Lexical Network*

Presenting Author: **Jennifer Weber**

**Jennifer Weber**: University of Colorado, Boulder; **Eliana Colunga**: University of Colorado Boulder

### FT36.6 *Grounding Action Verbs in Egocentric Visual Perception*

Presenting Author: **Yayun Zhang**

**Yayun Zhang**: University of Texas - Austin; **Ellis Cain**: University of California, Merced; **David Crandall**: Indiana University; **Chen Yu**: University of Texas at Austin

### FT37.1 *Beyond financial knowledge and IQ: The effect of temporal values on pension planning and financial wealth of natives and immigrants in the Netherlands*

Presenting Author: **Dr Yan Gu**

**Yeqiu Zheng**: Erasmus University Rotterdam; **Yan Gu**: UCL; **Arthur van Soest**: Tilburg University

### FT37.2 *Locating past and future: The Influence of Spatial Ability on Time Representation*

Presenting Author: **Ege Otenen**

**Ege Otenen**: Sabanci University; **Junko Kanero**: Sabanci University

### FT37.3 *Judgmental Time Series Forecasting: A systematic analysis of graph format and trend type*

Presenting Author: **ceyda tumen**

**ceyda tumen**: Bogazici University; **Aysecan Boduroglu**: Bogazici University

### FT37.4 *Time to get attention: The effect of temporal values on health, income and happiness*

Presenting Author: **Dr Yan Gu**

**Yeqiu Zheng**: Erasmus University Rotterdam; **Yan Gu**: UCL; **Arthur van Soest**: Tilburg University

### FT37.5 *Do humans have intuitive theories of time?*

Presenting Author: **James Daly**

**James Daly**: University of Texas at Austin; **Katharine A Tillman**: UT Austin

### FT37.6 *Temporal Gestures in Different Temporal Perspectives*

Presenting Author: **Emir Akbuga**

**Emir Akbuga**: Koç University; **Uras Gülhan**: Koç University; **Sudenur Güngör**: Koç University; **Tilbe Gökşun**: Koç University

### FT38.1 *The cognitive neuroscience of social learning in human evolution*

Presenting Author: **Heidi Øhrn**

**Heidi Øhrn**: Department of Psychosocial Science; **Larissa Mendoza Straffon**: University of Bergen; **Andrea Bender**: University of Bergen

### FT38.2 *Neurodiversity and anthropomorphism in social insect research*

Presenting Author: **Dr. Sidney Carls-Diamante**

**Alice Laciny**: Konrad Lorenz Institute; **Sidney Carls-Diamante**: University of Konstanz; **Giorgia Silani**: University of Vienna

### FT38.3 *Internalized Beauty Ideals and Sociocultural Pressures Shape How Young Women and Men Perceive Body Attractiveness*

Presenting Author: **Trinidad Belén Speranza**

**Trinidad Belén Speranza**: National Scientific and Technical Research Council; **Ivonnia M Flores Bravo**: Pontificia Universidad Católica Argentina; **Sofia Abrevaya**: National Scientific and Technical Research Council; **Verónica Ramenzoni**: National Scientific and Technological Council of Argentina

### FT38.4 *Active learning, feedback and hypercorrection effect in word learning*

Presenting Author: **Martina de Eccher**

**Martina de Eccher**: University of Goettingen; **Nivedita Mani**: University of Goettingen

### FT38.5 *The moderation effect of Illusion of Explanatory Depth of Knowledge towards National and International Issues*

Presenting Author: **Ms. Atekeh Ebrahimi**

**Atekeh Ebrahimi**: Pavia University; **Babak Hemmatian**: University of Illinois Urbana-Champaign; **Mehdi Purmohammad**: Shahid Beheshti University

### FT38.6 *People think of others as more prosocial when they are motivated by aesthetic goals vs. instrumental goals*

Presenting Author: **Tanushree Agrawal**

**Tanushree Agrawal**: University of California San Diego; **Adena Schachner**: University of California, San Diego

### FT39.1 *Modeling grammatical breakdown under processing load*

Presenting Author: **Lily Xu**

**Lily Xu**: University of California, Los Angeles; **Claire Moore-Cantwell**: UCLA

### FT39.2 *Reduced phonological processing during speech-planning*

Presenting Author: **Elvan Emurla**

**Elvan Emurla**: Humboldt University Berlin; **Pauline Reiß**: Humboldt University Berlin; **Lily Marie Schrewe**: Freie Universität Berlin; **Mathias Barthel**: HU Berlin

### FT39.3 *Morphological Strengthening of Phonological Performance in Child Speech*

Presenting Author: **Anastasia Chuprina**

**Anastasia Chuprina**: HSE

### FT39.4 *Les Liaisons Dangereuses: Quantifying French liaison-induced homophony*

Presenting Author: **Sharon Peperkamp**

**Sharon Peperkamp**: ENS-PSL; **Victor Antoine**: ENS-PSL; **Rory Turnbull**: Newcastle University

### FT39.5 *Walking munu and jumping bibi: Sound symbolism in (non)words produced by Turkish speakers*

Presenting Author: **Selin Topel**

**Selin Topel**: Leiden University; **Junko Kanero**: Sabanci University; **Noburo Saji**: Waseda University; **Tilbe Gökşun**: Koç University

### FT39.6 *Assessing the learnability of process interactions using grammatical spaces*

Presenting Author: **Christopher Yang**

**Christopher Yang**: MIT; **Adam Albright**: MIT; **Naomi H Feldman**: University of Maryland

### FT40.1 *Learners Integrate Syntactic Frames and Semantic Hypotheses in Cross-situational Verb Learning*

Presenting Author: **Yiran Chen**

**Yiran Chen**: University of Pennsylvania; **Alexander S LaTourrette**: University of Pennsylvania; **John Trueswell**: University of Pennsylvania

### FT40.2 *Key Open Door: Simulating Children's Early Three-word Utterances Reveals Simple Statistical Regularities Underlying Telegraphic Speech*

Presenting Author: **Qihui Xu**

**Qihui Xu**: Graduate Center, CUNY; **Martin Chodorow**: Hunter College and the Graduate Center of CUNY; **Virginia Valian**: Hunter College

### FT40.3 *Modelling Children's Sentence Recall using an Encoder-Decoder Network*

Presenting Author: **Dr. Daniel Freudenthal**

**Daniel Freudenthal**: University of Liverpool; **Julian M. Pine**: University of Liverpool; **Colin Bannard**: University of Manchester

#### FT40.4 Query-Based Memory Approximates Rational Induction: Applications to Infant Statistical Learning

Presenting Author: Robert Ralston

Robert Ralston: The Ohio State University; Vladimir Sloutsky: The Ohio State University

#### FT40.5 Identifying the distributional sources of children's early vocabulary

Presenting Author: Georgia Loukatou

George Kachergis: Stanford University; Georgia Loukatou: Stanford University; Michael C. Frank: Stanford University

#### FT40.6 A First Look at Zipf's Law and the Speech of Children with Autism Spectrum Disorder

Presenting Author: Leon Garcia-Camargo

Leon Garcia-Camargo: Gonzaga University; Jeb Kilfoyle: University of New Mexico; Paul De Palma: Gonzaga University; Mark VanDam: Washington State University; Joseph Stover: Gonzaga University

#### FT41.1 Understanding of Linguistic Scales in Speakers with Williams Syndrome

Presenting Author: Asya Achimova

Asya Achimova: University of Tübingen; Julien Musolino: Rutgers University; Rennie Pasquinelli: Johns Hopkins University; Martin V. Butz: University of Tübingen; Barbara Landau: Johns Hopkins University

#### FT41.2 Exploring age and gender differences in socio-semantic representations of words

Presenting Author: James Brand

Mikuláš Preininger: Charles University; James Brand: Charles University; Adam Kříž: Faculty of Arts, Charles University

#### FT41.3 The driving forces of polarity-sensitivity: Experiments with multilingual pre-trained neural language models

Presenting Author: Dr. Lisa Bylinina

Lisa Bylinina: Bookarang; Alexey Tikhonov: Independent researcher

#### FT41.4 Why are reckless socks not (more of) a thing? Towards an empirical classification of evaluative concepts.

Presenting Author: Lucien Baumgartner

Lucien Baumgartner: University of Zurich

#### FT41.5 Constructing Word Meaning without Latent Representations using Spreading Activation

Presenting Author: Kevin Shabahang

Kevin Shabahang: University of Melbourne; Simon Dennis: The University of Melbourne; Hyungwook Yim: Hanyang University

#### FT41.6 Frequently produced semantic features reflect principled connections

Presenting Author: Sangeet Khemlani

Hillary Harner: Altamira Corporation; Sangeet Khemlani: Naval Research Laboratory

#### FT42.1 Minimizing Expected Uncertainty in Visual Word Recognition: Are Readers Sensitive to the Distribution of Information across Word Forms?

Presenting Author: Dr Jon W Carr

Jon W Carr: International School for Advanced Studies (SISSA); Davide Crepaldi: International School for Advanced Studies (SISSA)

#### FT42.2 Parsing Compounds and Pseudocompounds at the Fovea

Presenting Author: Kyan Salehi

Kyan Salehi: Concordia University; Roberto G. de Almeida: Concordia University; Caitlyn Antal: McGill University

#### FT42.3 Low Spatial Proximity Between Text and Illustrations Improves Children's Comprehension and Attention: An Eye Tracking Study

Presenting Author: Morgan Boyd

Morgan Boyd: Carnegie Mellon University; Karrie E. Godwin: University of Maryland Baltimore County; Emma Gurchiek: Carnegie Mellon University; Anna Fisher: Carnegie Mellon University; Cassandra M Eng: Carnegie Mellon University

#### FT42.4 The effect of orthographic relationships, lexical status and contextual constraint on visual word recognition: Evidence from event-related potentials

Presenting Author: Neslihan Caliskan

Neslihan Caliskan: University of South Florida; Sara Milligan: University of South Florida; Elizabeth R Schotter: University of South Florida

#### FT42.5 Grapho-Syllabic Systematicity in Chinese: Chinese Pictographs Have a Non-Arbitrary relation with their Pronunciations

Presenting Author: Dr Hana Jee

Fiona Du: The University of Edinburgh; Hana Jee: The University of Edinburgh; Monica Tamariz: Harriot-Watt University; Richard Shillcock: The University of Edinburgh

#### FT42.6 Expectations and Noisy-Channel Processing of Relative Clauses in Arabic

Presenting Author: Nicole Dodd

Nicole Dodd: University of California, Davis; Emily Morgan: UC Davis



### FT43.1 Processing singular “they” is harder than plural “they”, but does not cause referential failure

Presenting Author: Peiyao Chen

Nadia Mansoor: Swarthmore College; Ella Shenkar: Swarthmore College; Ji Su Ahn: Swarthmore College; Peiyao Chen: Swarthmore College; Leah Owen-Oliner: Swarthmore College; Daniel Grodner: Swarthmore College

### FT43.2 Investigating the real-time effect of register-situation formality congruence versus verb-argument semantic fit during spoken language comprehension

Presenting Author: Angela Giovanna Patarroyo

Angela Giovanna Patarroyo: Humboldt-Universität zu Berlin; Katja Maquate: Humboldt-Universität zu Berlin; Aine Ito: National University of Singapore; Pia Knoeferle: Humboldt-Universität zu Berlin; Pia Knoeferle: Humboldt-Universität zu Berlin; Pia Knoeferle: Charité

### FT43.3 Second language vocabulary learning: When do pictures speak louder than words?

Presenting Author: Ms Paula Janjic

Paula Janjic: University of East Anglia; Kenny R Coventry: University of East Anglia

### FT43.4 Integrating Non-Native Speaker Identity in Semantic and Pragmatic Processing

Presenting Author: Dr Martin Ho Kwan Ip

Martin Ho Kwan Ip: University of Pennsylvania; Anna Papafragou: University of Pennsylvania

### FT43.5 Conditional probability of novel word sequences predicts immediate serial recall performance

Presenting Author: Cassandra Jacobs

Cassandra Jacobs: University at Buffalo; Steven Schwering: University of Wisconsin-Madison; Maryellen MacDonald: University of Wisconsin-Madison

### FT43.6 Linguistic Anticipation in Children’s Correction Sentences

Presenting Author: Alejandra Mitzi Castellón-Flores

Alejandra Mitzi Castellón-Flores: Universidad Nacional Autónoma de México; Armando Quetzalcóatl Angulo Chavira: UNAM; Natalia Arias-Trejo: Universidad Nacional Autónoma de México, UNAM

### FT44.1 How to Explain the Automaticity of Object Recognition

Presenting Author: Dr Aleksandra Mroczko-Wasowicz

Aleksandra Mroczko-Wasowicz: University of Warsaw; Alfonso Anaya: University of Warsaw

### FT44.2 Investigating the Composite Effect in Prototype-Defined Checkboards vs. Faces

Presenting Author: Emika Waguri

Emika Waguri: University of Exeter; IPL McLaren: University of Exeter; Ciro Civile: University of Exeter

### FT44.3 Local versus global coherence in the generalization of category training

Presenting Author: Josh C Glass

Josh C Glass: Binghamton University; Kenneth Kurtz: Binghamton University

### FT44.4 Which semantic properties of a feature affect access to an object concept?

Presenting Author: Caitlyn Antal

Caitlyn Antal: McGill University; Roberto G. de Almeida: Concordia University; Brendan Johns: McGill University

### FT44.5 Typicality gradients in the category fluency task

Presenting Author: Reba Koenen

Reba Koenen: Georgia Institute of Technology; Benjamin Y Hayden: University of Minnesota; Alexander B. Herman: University of Minnesota; Sashank Varma: Georgia Tech

### FT44.6 Typicality Gradients in Computer Vision Models

Presenting Author: Neha Upadhyay

Neha Upadhyay: Georgia Institute of Technology; Kritika Mittal: Georgia Institute of Technology; Sashank Varma: Georgia Tech

### FT45.1 The Principle of Sufficient Reason in ordinary cognition

Presenting Author: Scott Partington

Scott Partington: Cornell University; Alejandro Vesga: Cornell University; Shaun Nichols: Cornell University

### FT45.2 Priming Counterintuitive Scientific Ideas

Presenting Author: Andrew Shtulman

Andrew Shtulman: Occidental College; Daniel Paul Meller: Occidental College

### FT45.3 The Generation of Original and Known Explanations: How the presence or absence of relevant information influences sense-making and information foraging

Presenting Author: Kara Kedrick

Kara Kedrick: University of Minnesota; Iris Vilares: University of Minnesota; Paul Schrater: University of Minnesota, Twin Cities

#### FT45.4 *Alternative Outcomes, Surprise, and Predicting Replication of Psychological Research*

Presenting Author: **Edward Munnich**

**Edward Munnich:** University of San Francisco; **Marci Adolfo:** University of San Francisco; **Erica Divinagracia:** University of San Francisco; **Sydney Laxson:** University of San Francisco; **Sabrina Ibrahim:** University of San Francisco; **Joshua Condry:** University of San Francisco

#### FT45.5 *Simplicity beyond probability: Simplicity's role in evaluating explanations goes beyond providing cues to priors and likelihoods*

Presenting Author: **Thalia Vratsidis**

**Thalia Vratsidis:** Princeton University; **Tania Lombrozo:** Princeton University

#### FT45.6 *Cognitive Differences in Human and AI Explanation*

Presenting Author: **Robert A Kaufman**

**Robert A Kaufman:** University of California, San Diego; **David Kirsh:** UCSD

#### FT46.1 *Optimal learning under structural environmental uncertainty reveals inherent learning trade-offs*

Presenting Author: **SANTIAGO HERCE CASTAÑÓN**

**SANTIAGO HERCE CASTAÑÓN:** University of Geneva; **Pedro Cardoso-Leite:** University of Luxembourg; **C. Shawn Green:** University of Wisconsin-Madison; **Daphne Bavelier:** University of Geneva; **Paul Schrater:** University of Minnesota, Twin Cities

#### FT46.2 *How Optimal is Too Optimal? Expectations About Performance in the Traveling Salesman Problem*

Presenting Author: **Serena DeStefani**

**Serena DeStefani:** Rutgers University; **Samuel S Sohn:** Rutgers University; **Adeeb Kabir:** Rutgers University; **Mubbasir Kapadia:** Rutgers University; **Jacob Feldman:** Rutgers University

#### FT46.3 *Exploration as a Learning Strategy to Support Children's Pattern Learning*

Presenting Author: **Tricia J. Ngoon**

**Tricia J. Ngoon:** Carnegie Mellon University; **Vivian Leung:** University of California, San Diego; **Micah Goldwater:** University of Sydney; **Caren M. Walker:** University of California San Diego

#### FT46.4 *Far Analogical Transfer Is Associated with Aha Moments*

Presenting Author: **Christine Chesebrough**

**Christine Chesebrough:** Drexel University; **Tim George:** Union College

#### FT46.5 *Hints and the Aha-Accuracy Effect in Insight Problem Solving*

Presenting Author: **Taylor Strickland**

**Taylor Strickland:** University of Illinois at Chicago; **Jennifer Wiley:** University of Illinois Chicago; **Stellan Ohlsson:** University of Illinois at Chicago

#### FT46.6 *Measuring Quality of General Reasoning*

Presenting Author: **Luke Rowe**

**Alexandru Marcoci:** University of Dundee; **Margaret E Webb:** The University of Melbourne; **Luke I Rowe:** Australian Catholic University; **Ashley Barnett:** University of Melbourne; **Tamar Primoratz:** The University of Melbourne; **Ariel Kruger:** University of Melbourne; **Benjamin Stone:** University of Melbourne; **Michael L Diamond:** University of Melbourne; **Morgan Saletta:** University of Melbourne; **Tim van Gelder:** University of Melbourne; **Simon Dennis:** University of Melbourne

#### FT47.1 *Russian-language semantic categories and their brain activity correspondence*

Presenting Author: **Dr., Prof ELENA M POZDNYAKOVA**

**Vera Ivanovna Zabotkina:** Russian State University for the Humanities; **Artemy Kotov:** Kurchatov Institute; **ELENA M POZDNYAKOVA:** Moscow State Institute of International Affairs (University)

#### FT47.2 *N400 amplitudes as Bayesian surprise at the level of meaning*

Presenting Author: **Dr. Milena Rabovsky**

**Alma Lindborg:** Potsdam University; **Lea Musiolek:** Technical University Berlin; **Dirk Ostwald:** Universität Magdeburg; **Milena Rabovsky:** University of Potsdam

#### FT47.3 *Long-Term Plausibility of Language Models and Neural Dynamics during Narrative Listening*

Presenting Author: **Subba Reddy Oota**

**Subba Reddy Oota:** Inria; **Frederic Alexandre:** Inria-Research; **Xavier Hinaut:** Inria

#### FT47.4 *Catastrophic interference in neural network models is mitigated when the training data reflect a power-law environmental structure*

Presenting Author: **Sibley Lyndgaard**

**Sibley Lyndgaard:** Georgia Institute of Technology; **Zachary R Tidler:** Georgia Institute of Technology; **Lucas Provine:** Georgia Institute of Technology; **Sashank Varma:** Georgia Tech



### FT47.5 *The Neurobehavioral Basis of Parallel Individuation and Numerical Approximation*

Presenting Author: **Jean Ee Tang**

**Jean Ee Tang:** Teachers College, Columbia University; **Nick Bisbee:** Johns Hopkins University; **Maitri Jain:** Teachers College, Columbia University; **Daniela Sezcon-Cepeda:** Teachers College, Columbia University; **Sadra Gerami:** Teachers College, Columbia University; **Erin Kirby:** Teachers College, Columbia University; **Ariana Olivares:** Teachers College, Columbia University; **Emily Rose Mantaro:** Teachers College, Columbia University; **Samah Abdelrahim:** Teachers College, Columbia University; **Paul J Smith:** Teachers College, Columbia U.; **Sungbong Kim:** Teachers College, Columbia University; **Peter Gordon:** Teachers College, Columbia University

### FT47.6 *A Research Blueprint for the SOM Neurocomputational Cognitive Modeling of Brain Disorders*

Presenting Author: **Dr Spyridon Revithis**

**Spyridon Revithis:** UNSW

### FT48.1 *Bizarreness Effect and Its Relation to Memory and Metamemory*

Presenting Author: **Samet Kaya**

**Samet Kaya:** Bilkent University; **Miri Besken:** Bilkent University

### FT48.2 *Does Sans Forgetica font facilitate word memory?*

Presenting Author: **Lucy Cui**

**Lucy Cui:** University of California, Los Angeles; **Jereth Liu:** Geffen Academy at UCLA

### FT48.3 *Changed-goal or cue-strengthening? An investigation into the underlying mechanisms of judgment of learning reactivity*

Presenting Author: **Minyu Chang**

**Minyu Chang:** Cornell University; **Charles Brainerd:** Cornell University

### FT48.4 *Immediate Feedback Decreases False Recognition in the DRM Paradigm*

Presenting Author: **Dr. Angela Nelson Lowe**

**Angela Nelson Lowe:** University of California, San Diego; **John Wixted:** UC San Diego

### FT48.5 *Finding the right words: A computational model of cued lexical retrieval*

Presenting Author: **Molly Apssel**

**Molly Apssel:** Indiana University; **Abhilasha A Kumar:** Indiana University; **Michael N. Jones:** Indiana University

### FT48.6 *A neural implementation of MINERVA 2*

Presenting Author: **Professor Erik D Reichle**

**Erik D Reichle:** Macquarie University; **Aaron Veldre:** University of Sydney; **Lili Yu:** Macquarie University; **Sally Andrews:** The University of Sydney

### FT49.1 *Limits on Neural Networks: Agent-First Strategy in Child Comprehension*

Presenting Author: **Dr. Gyu-Ho Shin**

**Gyu-Ho Shin:** Palacký University Olomouc; **Seongmin Mun:** Chosun University

### FT49.2 *The contingency symmetry bias as a foundation of word learning: Evidence from 8-month-olds in a matching-to-sample task*

Presenting Author: **Dr. Mutsumi Imai**

**Mutsumi Imai:** Keio University; **Chizuko Murai:** Seika Women's Junior College; **Masato Ohba:** Keio University; **Shohei Hidaka:** Japan Advanced Institute of Science and Technology; **Hiroyuki Okada:** Tamagawa University; **Kazuhide Hashiya:** Kyushu University

### FT49.3 *Prosodic input and children's word learning in infant- and adult-directed speech*

Presenting Author: **Dr. Mengru Han**

**Mengru Han:** East China Normal University; **Nivja Helena De Jong:** LUCL; **Rene Kager:** Utrecht University

### FT49.4 *Visual perception of vertical movements in word learning*

Presenting Author: **Sho Akamine**

**Sho Akamine:** Max Planck Institute for Psycholinguistics; **Akari Omine:** transcosmos inc.; **Tsuyoshi Kohatsu:** University of the Basque Country; **Manami Sato:** Okinawa International University

### FT49.5 *Supporting Word Learning from Shared Book Reading Sessions with Preschoolers*

Presenting Author: **Michelle Lynn Luna**

**Michelle Lynn Luna:** University of California, Los Angeles; **Catherine Sandhofer:** University of California, Los Angeles

### FT49.6 *Learning from Word Books: Does the Type of Illustration Matter?*

Presenting Author: **Jennifer Weber**

**Jennifer Weber:** University of Colorado, Boulder; **Eliana Colunga:** University of Colorado Boulder

### FT50.1 *Interaction in Acting Training and its Manifestations in Novices and Actors*

Presenting Author: **Jingyan Sun**

**Jingyan Sun:** The University of Tokyo; **Takeshi Okada:** The University of Tokyo

### FT50.2 *The acquisition of subordinate nouns as pragmatic inference: Semantic alternatives modulate subordinate meanings*

Presenting Author: **June Choe**

**June Choe:** University of Pennsylvania; **Anna Papafragou:** University of Pennsylvania

**FT50.3 Vacant****FT50.4 Study on Heterogeneous Roles in Coordinated Behavior of a Triad Using Force-based Models**

Presenting Author: Jun Ichikawa

Jun Ichikawa: Shizuoka University; Keisuke Fujii: Nagoya University

**FT50.5 Rhythmic Coordination Affects Children's Perspective-Taking during Online Communication**

Presenting Author: Yingjia Wan

Yingjia Wan: Institute of Psychology, Chinese Academy of Sciences; Yipu Wei: Peking University; Baorui Xu: Peking University; Michael Tanenhaus: University of Rochester

**FT50.6 Modelling the Emergence of Linguistic Conventions for Word Order: The Roles of Semantics, Structural Priming, and Population Structure**

Presenting Author: Loïs Dona

Loïs Dona: Utrecht University; Marieke Schouwstra: University of Amsterdam

**FT51.1 Emotion Evaluator: Expanding the Affective Lexicon with Neural Network Model**

Presenting Author: Junho Lee

Junho Lee: Seoul National University; Jaeseo Lim: Seoul National University; Jooyong Park: Department of Psychology; Cheongtag Kim: Seoul National University

**FT51.2 A Quantum Walk Model For Emotion Transmission In Serial Reproduction of Narratives**

Presenting Author: Jiaqi Huang

Jiaqi Huang: Indiana University; Qizi Zhang: Indiana University; Jerome Busemeyer: Indiana University; Fritz Breithaupt: Indiana University

**FT51.3 High-arousal positive emotion evoking is more effective in VR than on a 2D monitor based on computational affection**

Presenting Author: Dr. Feng Liu

Feng Liu: East China Normal University; Yihao Zhou: East China Normal University; Xun Jia: East China Normal University; Hanyang Wang: East China Normal University; Siyuan Shen: East China Normal University; Aimin Zhou: East China Normal University

**FT51.4 Trait anxiety modulates negative affect-cued distribution of visuo-spatial attention.**

Presenting Author: Ms. Gursimran Kaur

Gursimran Kaur: IIITD; Rakshita Anand: IIIT Delhi; Mrinmoy Chakrabarty: Indraprastha Institute of Information Technology Delhi (IIIT-D)

**FT51.5 Role of Implicit Emotion in Response Inhibition and Response Adjustment**

Presenting Author: Mr. Shubham Pandey

Shubham Pandey: Indian Institute of Technology Bombay, Mumbai; Rashmi Gupta: Indian Institute of Technology Bombay, Mumbai

**FT51.6 Psychological Flexibility Determines COVID-19 Peritraumatic Distress and Severity of Depression**

Presenting Author: Rishabh Singhal

Rishabh Singhal: International Institute of Information Technology; Minaxi Goel: International Institute of Information Technology, Hyd; Priyanka Srivastava: International Institute of Information Technology, Hyderabad

**FT52.1 Modeling Causal Inference from Emotional Displays**

Presenting Author: Dennis W.H. Teo

Dennis W.H. Teo: National University of Singapore; Zheng Yong Ang: National University of Singapore; Desmond Ong: National University of Singapore

**FT52.2 Analogy Use in Parental Explanation**

Presenting Author: Yang Gao

Yang Gao: Tsinghua University; Kexin Que: Tsinghua University; Zijing Tan: Tsinghua University; Yi Zhang: Tsinghua University; Stella Christie: Tsinghua University

**FT52.3 Expectations of Causal Determinism in Causal Learning**

Presenting Author: Graduate Student Phuong (Phoebe) Ngoc Dinh

Phuong (Phoebe) Ngoc Dinh: Carnegie Mellon University; David Danks: University of California, San Diego

**FT52.4 Causal invariance guides inference of empirical integration rules**

Presenting Author: Patricia Cheng

Jeffrey K. Bye: University of Minnesota; Patricia Cheng: UCLA

**FT52.5 Exploring the Richness of Human Causal Reasoning with Think Aloud Data**

Presenting Author: Dr Stephen H Dewitt

Stephen H Dewitt: University College London; Ekaterina K Stoilova: University College London; David Lagnado: University College London

**FT52.6 The Perceived Dilution of Causal Strength**

Presenting Author: Simon Stephan

Simon Stephan: University of Göttingen; Neele Engelmann: University of Göttingen; Michael R. Waldmann: University of Göttingen

### FT53.1 *Identifying a Phonetic Factors of Onomatopoeias Correlated to Sound Symbolic Commons between Japanese and Non-Japanese Speakers*

Presenting Author: **Maki Miyamoto**

**Maki Miyamoto:** Japan Advanced Institute of Science and Technology; **Shohei Hidaka:** Japan Advanced Institute of Science and Technology

### FT53.2 *'Sheep' and 'Ship': An investigation into English vowel merger in multilingual Singapore*

Presenting Author: **Ms Fei Ting Woon**

**Fei Ting Woon:** Nanyang Technological University; **Suzy J. Styles:** Nanyang Technological University

### FT53.3 *Metonymy as a Universal Cognitive Phenomenon: Evidence from Multilingual Lexicons*

Presenting Author: **Mrs. Temuulen Khishigsuren**

**Temuulen Khishigsuren:** National University of Mongolia; **Gábor Bella:** University of Trento; **Thomas Brochhagen:** Universität Pompeu Fabra; **Daariimaa Marav:** National University of Mongolia; **Fausto Giunchiglia:** University of Trento; **Khuyagbaatar Batsuren:** National University of Mongolia

### FT53.4 *Studying the Effect of Moderator Biases on the Diversity of Online Discussions: A Computational Cross-linguistic Study*

Presenting Author: **Sabit Hassan**

**Sabit Hassan:** University of Pittsburgh; **Katherine J Atwell:** University of Pittsburgh; **Malihe Alikhani:** UPitt

### FT53.5 *From social identity to meaning interpretation: when looser speakers are treated more strictly*

Presenting Author: **Andrea Beltrama**

**Andrea Beltrama:** University of Pennsylvania; **Florian Schwarz:** University of Pennsylvania

### FT53.6 *Quantifying the Socio-semantic Representations of Words*

Presenting Author: **James Brand**

**Mikuláš Preininger:** Charles University; **James Brand:** Charles University; **Adam Kříž:** Faculty of Arts, Charles University

### FT54.1 *Sampling-based probability construction explains individual differences in risk preference*

Presenting Author: **Mr Bhanu Prakash Ankoju**

**Bhanu Prakash Ankoju:** Indian Institute of Technology Kanpur; **Nisheeth Srivastava:** Indian Institute of Technology

### FT54.2 *Selecting between visuomotor lotteries to measure mental effort in risky decisions*

Presenting Author: **Selecting between visuomotor lotteries to measure mental effort in risky decisions samarth mehrotra**  
**samarth mehrotra:** Indian Institute of Technology Kanpur; **Nisheeth Srivastava:** Indian Institute of Technology

### FT54.3 *Perception of Risk and Intention for Vaccination in times of Covid-19 emergency in an Indian sample*

Presenting Author: **Dr. Divya Bhatia**

**Alessandro Santirocchi:** Sapienza University of Rome; **Divya Bhatia:** O.P. Jindal Global University; **Rakhi Gupta:** O.P. Jindal Global University; **Pietro Spataro:** Universitas Mercatorum; **Clelia Rossi-Arnaud:** Sapienza University of Rome; **Vincenzo Cestari:** Sapienza University of Rome

### FT54.4 *Meta-Learning of Dynamic Policy Adjustments in Inhibitory Control Tasks*

Presenting Author: **Soumya Chatterjee**

**Soumya Chatterjee:** Google Research India; **Aakriti Kumar:** University of California, Irvine; **Pradeep Shenoy:** Google Research India

### FT54.5 *Radial Basis Leaky Competing Accumulator Model: A Biologically Plausible Framework for Decision-Making in a Continuous Option Space*

Presenting Author: **Amir Hosein Hadian Rasanan**

**Amir Hosein Hadian Rasanan:** Shahid Beheshti University; **Jamal Amani Rad:** Shahid Beheshti University; **Laura Fontanesi:** University of Basel

### FT54.6 *Connecting Exploration, Generalization, and Planning in Correlated Trees*

Presenting Author: **Tobias Ludwig**

**Tobias Ludwig:** MPI Biological Cybernetics; **Charley M Wu:** University of Tübingen; **Eric Schulz:** Max Planck Institute for Biological Cybernetics

### FT55.1 *Summary statistics extracted in tactile feature*

Presenting Author: **Midori Tokita**

**Midori Tokita:** Mejiro University; **Akira Ishiguchi:** Ochanomizu University

### FT55.2 *Perceptual Grouping for War and Peace*

Presenting Author: **Zhen Li**

**Zhen Li:** Zhejiang University; **Ning Tang:** Zhejiang University; **jiaying Zhang:** Zhejiang University; **Siyi Gong:** University of California, Los Angeles; **Jifan Zhou:** Zhejiang University; **Mowei Shen:** Zhejiang University; **Tao Gao:** UCLA

### FT55.3 *Assessing Deepfake Video Detection Ability Using Unsupervised Machine Learning*

Presenting Author: **Gernel Walker**

**Zachary R Tidler:** Georgia Institute of Technology; **Thereza Pereira:** Federal University of Paraíba; **Gernel Lumacad:** St. Rita's College of Balingasag; **Richard Catrambone:** Georgia Institute of Technology



#### FT55.4 *Face-preferring regions in FFA, STS, and MPFC have different functions.*

Presenting Author: **Heather L Kosakowski**

**Heather L Kosakowski:** MIT; **Nancy Kanwisher:** Massachusetts Institute of Technology; **Rebecca Saxe:** MIT

#### FT55.5 *Manipulating the face contour affects face recognition performance leaving the Face Inversion Effect unaltered*

Presenting Author: **Siobhan McCourt**

**Siobhan McCourt:** University of Exeter; **IPL McLaren:** University of Exeter; **Ciro Civile:** University of Exeter

#### FT55.6 *The speed of statistical perception*

Presenting Author: **Brynn E Sherman**

**Brynn E Sherman:** Yale University; **Sami R Yousif:** Yale University; **Caroline Reiner:** Yale University; **Frank Keil:** Yale University

#### FT56.1 *Neural Language Model-based Readability Assessment of Computer Science Introductory Texts for English-as-a-Second Language Learners*

Presenting Author: **Yo Ehara**

**Yo Ehara:** Tokyo Gakuhei University

#### FT56.2 *When we feel watched: Effects of presenting the teacher's face on students' monitors during online classes*

Presenting Author: **Kozue Miyashiro**

**Kozue Miyashiro:** Utsunomiya University

#### FT56.3 *Science Education Helps Suppress Naïve Science Thinking*

Presenting Author: **Rui WANG**

**Rui WANG:** University of Cambridge; **Aaron Britton:** Queen's University Belfast; **Harriet Godfrey:** Queen's University Belfast; **Aidan Feeney:** Queen's University Belfast; **Michelle Ellefson:** University of Cambridge

#### FT56.4 *The relations between parent-educator communication, the home environment, and children's outcomes in preschool*

Presenting Author: **Tanya M Paes**

**Tanya M Paes:** Purdue University; **Joyce Lin:** California State University, Fullerton; **Robert Duncan:** Purdue University; **David Purpura:** Purdue University; **Sara Schmitt:** Purdue University

#### FT56.5 *Math Self-Concept, Stereotypes, Achievement and Anxiety – A Cross-Sectional Study*

Presenting Author: **M.Sc. Alexander von Bergen**

**Alexander von Bergen:** ETH Zurich; **Dario Cvencek:** Institute of Learning and Brain Sciences; **Esther Ziegler:** ETH Zurich; **Venera Gashaj:** ETH; **Andrew Meltzoff:** University of Washington, Institute of Learning and Brain Sciences; **Manu Kapur:** ETH Zurich

#### FT56.6 *Does Expressive Writing Blunt the Effects of Math Anxiety on Math Performance? A Conceptual Replication and Extension of Park et al. (2014)*

Presenting Author: **Daniel A Scheibe**

**Daniel A Scheibe:** Kent State University; **Christopher Was:** Kent State University; **Clarissa A Thompson:** Kent State University

#### FT57.1 *Evaluating locality in NMT models*

Presenting Author: **Itay Itzhak**

**Itay Itzhak:** Tel Aviv University; **Koustuv Sinha:** McGill; **Brenden Lake:** NYU; **Adina Williams:** Facebook AI Research; **Dieuwke Hupkes:** Facebook AI Research

#### FT57.2 *Efficient learning through compositionality in a CNN-RNN model consisting of a bottom-up and a top-down pathway*

Presenting Author: **Martin V. Butz**

**Sarah Fabi:** University of Tübingen; **Lena Holzwarth:** University of Tübingen; **Martin V. Butz:** University of Tuebingen

#### FT57.3 *Priority-Adjusted Replay for Successor Representations*

Presenting Author: **Mr Samuel Barnett**

**Samuel Barnett:** Princeton University; **Ida Momennejad:** Microsoft Research

#### FT57.4 *Towards Capturing Scientific Reasoning to Automate Data Analysis*

Presenting Author: **Yolanda Gil**

**Yolanda Gil:** University of Southern California; **Deborah Khider:** Information Sciences Institute; **Maximiliano Osorio:** University of Southern California; **Varun Ratnakar:** Information Sciences Institute; **Hernan Vargas:** University of Southern California; **Daniel Garijo:** University of Southern California; **Suzanne Pierce:** The University of Texas in Austin

#### FT57.5 *User-Centric Enhancements to Explainable AI Algorithms for Image Classification*

Presenting Author: **Severine Soltani**

**Severine Soltani:** University of California, San Diego; **Robert A Kaufman:** University of California, San Diego; **Michael J Pazzani:** University of California, San Diego

#### FT57.6 *Representational Smoothing to Improve Medical Image Decision Making*

Presenting Author: **Eeshan Hasan**

**Eeshan Hasan:** Vanderbilt University; **Jennifer Trueblood:** Vanderbilt University

#### FT58.1 *A Quantitative Symbolic Approach to Individual Human Reasoning*

Presenting Author: **Emmanuelle-Anna Dietz**

**Emmanuelle Dietz:** Airbus Central Research & Technology; **Johannes Klaus Fichte:** TU Wien; **Florim Hamiti:** Empty

### FT58.2 *Bayesian comparators: a probabilistic modeling tool for similarity evaluation between predicted and perceived patterns*

Presenting Author: **Julien Diard**

**Alexandra Steinhilber**: Laboratoire de Psychologie et NeuroCognition; **Sylviane Valdois**: CNRS et Université Grenoble Alpes; **Julien Diard**: CNRS - Université Grenoble Alpes

### FT58.3 *Reasoning from Samples to Populations: Children Use Variability Information to Predict Novel Outcomes*

Presenting Author: **Elizabeth Lapidow**

**Elizabeth Lapidow**: University of California, San Diego; **Mariel K. Goddu**: Harvard University; **Caren M. Walker**: University of California San Diego

### FT58.4 *The Myside Bias in Argument Evaluation: A Bayesian Model*

Presenting Author: **Edoardo Baccini**

**Edoardo Baccini**: University of Groningen; **Stephan Hartmann**: LMU Munich

### FT58.5 *Examining Strategy Differences on the Relational Match-to-Sample Task (RMTS)*

Presenting Author: **Graduate Researcher Mercury K Mason**

**Mercury K Mason**: Binghamton University; **Kenneth Kurtz**: Binghamton University

### FT58.6 *The effect of language on the approximate number system*

Presenting Author: **Harmen Gudde**

**Harmen Gudde**: University of East Anglia; **Kenny R Coventry**: University of East Anglia

### FT59.1 *Role of Prior Knowledge in Feedback Timing*

Presenting Author: **Julie Shirah**

**Julie Shirah**: University of Kentucky; **Pooja Gupta Sidney**: University of Kentucky

### FT59.2 *Fact-checking Instruction Strengthens the Association between Attitudes and Use of Lateral Reading Strategies in College Students*

Presenting Author: **Jessica E. Brodsky**

**Jessica E. Brodsky**: College of Staten Island and the Graduate Center, CUNY; **Arshia K Lodhi**: College of Staten Island; **Catherine M Messina**: Columbia University; **Patricia J. Brooks**: College of Staten Island and the Graduate Center, CUNY

### FT59.3 *Retrieval Practice Promotes Learning of Turkish as a Foreign Language: A Computer-Assisted Language Learning Study*

Presenting Author: **Maya C Rose**

**Maya C Rose**: CUNY Graduate Center; **Patricia J. Brooks**: College of Staten Island and the Graduate Center, CUNY; **Arshia K Lodhi**: College of Staten Island; **Angela Cortez**: College of Staten Island

### FT59.4 *Self-Explaining the Notional Machine to Improve Novice Programmers' Learning and Mental Models, Supported by a Computer Tutor System*

Presenting Author: **Miss Veronica S Chiarelli**

**Veronica S Chiarelli**: Carleton University; **Kasia Muldner**: Carleton University

### FT59.5 *How does Sustaining and Interleaving Visual Scaffolding Help Learners? A Classroom Study with an Intelligent Tutoring System*

Presenting Author: **Tomohiro Nagashima**

**Tomohiro Nagashima**: Carnegie Mellon University; **Elizabeth Ling**: Harvard University; **Bin Zheng**: Carnegie Mellon University; **Anna N. Bartel**: University of Wisconsin, Madison; **Elena Marie Silla**: University of Delaware; **Nicholas A Vest**: University of Wisconsin-Madison; **Martha W Alibali**: University of Wisconsin-Madison; **Vincent Alevan**: Carnegie Mellon University

### FT59.6 *Eliciting Proactive and Reactive Control during Use of an Interactive Learning Environment*

Presenting Author: **Deniz Sonmez Unal**

**Deniz Sonmez Unal**: University of Pittsburgh; **Catherine M. Arrington**: Lehigh University; **Erin Solovey**: Worcester Polytechnic Institute; **Erin Walker**: University of Pittsburgh

### FT60.1 *Multimodal Communication in Virtual and Face-to-Face Settings: Gesture Production and Speech Disfluency*

Presenting Author: **Burcu Arslan**

**Burcu Arslan**: Koc University; **Can Avci**: Koç University; **Tilbe Göksun**: Koç University

### FT60.2 *Gesture and Speech Disfluency in Narrative Context: Disfluency Rates in Spontaneous, Restricted, and Encouraged Gesture Conditions*

Presenting Author: **Can Avci**

**Can Avci**: Koç University; **Burcu Arslan**: Koc University; **Tilbe Göksun**: Koç University

### FT60.3 *Timing relationships between representational gestures and speech: A corpus based investigation*

Presenting Author: **Dr Ed Donnellan**

**Ed Donnellan**: University College London; **Levent Emir Özder**: Koç University; **Hillarie Man**: University College London; **Beata Grzyb**: University College London; **Yan Gu**: UCL; **Gabriella Vigliocco**: University College London

### FT60.4 *Why do people gesture more during disfluent speech? A pragmatic account.*

Presenting Author: **Yağmur Deniz Kısa**

**Yağmur Deniz Kısa**: University of Chicago; **Cordelia Achen**: Stanford University; **Susan Goldin-Meadow**: University of Chicago; **Daniel Casasanto**: Cornell University



### FT60.5 Exploring the Role of Pragmatic Reasoning in Linguistic Framing Effects

Presenting Author: Kevin J. Holmes

Rishi Krishnamurthy: Reed College; Nan Elpers: Reed College; Paul Thibodeau: Oberlin College; Stephen Flusberg: Purchase College, SUNY; Kevin J. Holmes: Reed College

### FT60.6 Accessibility factors that lead to good-enough language production

Presenting Author: Crystal Lee

Crystal Lee: Princeton University; Casey Lew-Williams: Princeton University; Adele Goldberg: Princeton University

### FT61.1 Creativity, Compositionality, and Common Sense in Human Goal Generation

Presenting Author: Guy Davidson

Guy Davidson: New York University; Todd M Gureckis: New York University; Brenden Lake: NYU

### FT61.2 Playing the Lottery of a Lifetime: The Effect of Socially Induced Aspiration on Q-Learning Agents

Presenting Author: Yosi Hatekar

Yosi Hatekar: University of Toronto; Rachit Dubey: Princeton University; Ted Sumers: Princeton University; Ilia Sucholutsky: Princeton University

### FT61.3 Making Predictions Without Data: How an Instance-Based Learning Model Predicts Sequential Decisions in the Balloon Analog Risk Task

Presenting Author: Erin H. Bugbee

Erin H. Bugbee: Carnegie Mellon University; Cleotilde Gonzalez: Carnegie Mellon University

### FT61.4 Selection of goal-consistent acoustic environments by adults and preschool-aged children

Presenting Author: Rondeline M. Williams

Rondeline M. Williams: Stanford University; Michael C. Frank: Stanford University

### FT61.5 Decision Variables in the Case of Police Lineup Rejections

Presenting Author: Anne S Yilmaz

Anne S Yilmaz: University of California, San Diego; John Wixted: UC San Diego

### FT61.6 Undoing in human planning

Presenting Author: Dongjae Kim

Dongjae Kim: New York University; Sherry Dongqi Bao: New York University; Qixiu Fu: New York University; Wei Ji Ma: New York University

### FT62.1 Adults' Processing of Overextensions Reflects Category Violation. An ERP study

Presenting Author: Lucas Raynal

Lucas Raynal: Paris Descartes; Evelyne Clément: Université CY Cergy Paris; Pia Rämä: Paris Descartes; Emmanuel Sander: University of Geneva; Louise Goyet: Paris 8

### FT62.2 An End-to-End Imagery-Based Modeling of Solving Geometric Analogy Problems

Presenting Author: Yuan Yang

Yuan Yang: Vanderbilt University; Deepayan Sanyal: Vanderbilt University; Joel Michelson: Vanderbilt University; James Ainooson: Vanderbilt University; Maithilee Kunda: Vanderbilt University

### FT62.3 Perceptual Similarity Affects Relational Judgements

Presenting Author: Dr. Priya B. Kalra

Priya B. Kalra: University of Western Ontario

### FT62.4 Children's Acquisition of the Concept of Antonym Across Different Lexical Classes

Presenting Author: Amalia Ionescu

Amalia Ionescu: UCLA; Hongjing Lu: UCLA; Keith Holyoak: University of California, Los Angeles; Catherine Sandhofer: University of California, Los Angeles

### FT62.5 Conceptual Prerequisites for Proportional Analogy

Presenting Author: Shuyuan Yu

Shuyuan Yu: the Ohio State University; Ho-Chieh Lin: The Ohio State University; John Opfer: The Ohio State University

### FT62.6 Pragmatics of Metaphor Revisited: Modeling the Role of Degree and Salience in Metaphor Understanding

Presenting Author: Alexandra Mayn

Alexandra Mayn: Saarland University; Vera Demberg: Saarland University

### FT63.1 Agreement can facilitate learning of noun class systems

Presenting Author: Shira Tal

Shira Tal: University of Edinburgh; Kenny Smith: University of Edinburgh; Jennifer Culbertson: University of Edinburgh

### FT63.2 Does Positional Level Structural Priming Depend on the Verb?

Presenting Author: Dr. Alexandra K Frazer

Alexandra K Frazer: Muhlenberg College; Anna Riordan: Muhlenberg College; Jessica N Rostron: Muhlenberg College

### FT63.3 *Two measures for complement coercion interpretation: Interpretation vs production for complement coercion*

Presenting Author: **Barend Beekhuizen**

**Frederick Gietz**: University of Toronto; **Barend Beekhuizen**: University of Toronto, Mississauga

### FT63.4 *Syntactic adaptation to short-term cue-based distributional regularities*

Presenting Author: **Weijie Xu**

**Weijie Xu**: University of California, Irvine; **Jiaxuan Li**: University of California Irvine; **Ming Xiang**: University of Chicago; **Richard Futrell**: UC Irvine

### FT63.5 *Learning Biases for Syncretic Morphological Systems*

Presenting Author: **Sara Finley**

**Sara Finley**: Pacific Lutheran University

### FT63.6 *Does One Size Fit all in Crosslinguistic Dependency Length Minimization?*

Presenting Author: **Zoey Liu**

**Zoey Liu**: Boston College; **Ria Upreti**: University of Texas at Austin; **Mathew A. Kramer**: University of Michigan; **Savithry Namboodiripad**: University of Michigan, Ann Arbor

### FT64.1 *Inter-Team Cognitive Diversity – Using Distributed Cognition for Analyzing Team Cognitive Diversity*

Presenting Author: **Juhani Merilehto**

**Juhani Merilehto**: University of Jyväskylä

### FT64.2 *Sharing of mental effort in a joint task*

Presenting Author: **Vjerran Keric**

**Vjerran Keric**: Central European University; **Natalie Sebanz**: Central European University

### FT64.3 *Modeling cognitive diversity in group problem solving*

Presenting Author: **Samuli Reijula**

**Samuli Reijula**: University of Helsinki; **Jaakko Kuorikoski**: University of Helsinki

### FT64.4 *Learning Through Collaboration: Designing Collaborative Activities to Promote Individual Learning*

Presenting Author: **Katherine S Moore**

**Katherine S Moore**: MIT; **James E. Corter**: Columbia University

### FT64.5 *Know your network: people infer cultural drift from network structure, and expect collaborating with more distant experts to improve innovation, but collaborating with network-neighbors to improve memory*

Presenting Author: **Emory Richardson**

**Emory Richardson**: Yale University; **Daniela Miro-Rivera**: Yale University; **Frank Keil**: Yale University

### FT64.6 *Exploration is Higher in Social Contexts at the Cost of Rewards*

Presenting Author: **Rista C Plate**

**Rista C Plate**: University of Pennsylvania; **Huang Ham**: Department of Psychology; **Adrianna C. Jenkins**: University of Pennsylvania

### FT65.1 *Color Overmodification Emerges from Data-Driven Learning and Pragmatic Reasoning*

Presenting Author: **Fei Fang**

**Fei Fang**: Stanford University; **Kunal Sinha**: Stanford University; **Noah Goodman**: Stanford University; **Christopher Potts**: Stanford University; **Elisa Kreiss**: Stanford University

### FT65.2 *Pragmatic Reasoning in Structured Signaling Games*

Presenting Author: **Emil Carlsson**

**Emil Carlsson**: Computer Science and Engineering; **Devdatt Dubhashi**: Chalmers University of Technology

### FT65.3 *Applying the pragmatics-first approach to agent-based models of emergent communication – insights from a study in experimental semiotics*

Presenting Author: **Katarzyna Skowrońska**

**Katarzyna Skowrońska**: University of Warsaw; **Piotr Jończyk**: University of Warsaw

### FT65.4 *Modeling atypicality inferences in pragmatic reasoning*

Presenting Author: **Vera Demberg**

**Ekaterina Kravtchenko**: Saarland University; **Vera Demberg**: Saarland University

### FT65.5 *An explanation of representativeness: contrastive confirmation-theoretical reasoning motivated by question-answering dynamics*

Presenting Author: **Janek Guerrini**

**Janek Guerrini**: Ecole Normale Supérieure; **Mathias Sablé-Meyer**: NeuroSpin center, CEA DRF/I2BM, INSERM, Université Paris-Sud, Université Paris-Saclay; **Salvador Mascarenhas**: Ecole Normale Supérieure

### FT65.6 *Adjusting the Use of Generalizations Based on Audience Expertise*

Presenting Author: **Jeff Coon**

**Jeff Coon:** UC Irvine; **Alexander Etz:** The University of Texas at Austin; **Gregory Scontras:** University of Irvine; **Barbara W Sarnecka:** University of California-Irvine

### FT66.1 *Origins of Art: the Intersection of Cognitive and Cultural Evolution*

Presenting Author: **Larissa Mendoza Straffon**

**Larissa Mendoza Straffon:** university of Bergen

### FT66.2 *What's Different About Improvised Rap?*

Presenting Author: **Jordan A Ackerman**

**Jordan A Ackerman:** UC Merced

### FT66.3 *Cue integration in speech and music*

Presenting Author: **May Pik Yu Chan**

**May Pik Yu Chan:** University of Pennsylvania; **Jianjing Kuang:** University of Pennsylvania

### FT66.4 *Young children's drawings and descriptions of layouts and objects*

Presenting Author: **Dr. Moira Rose Dillon**

**Agata Bochynska:** New York University; **Moira Rose Dillon:** New York University

### FT66.5 *Fluency modulates ordering of visual narrative layouts*

Presenting Author: **Neil Cohn**

**Neil Cohn:** Tilburg University; **Irmak Hacimusaoğlu:** Tilburg University; **Bien Klomberg:** Tilburg University

### FT66.6 *Improving Improv: Effects of Interpersonal Coordination on Music Improvisation*

Presenting Author: **Tevin Williams**

**Tevin Williams:** University of North Carolina at Charlotte; **Alexia Galati:** University of North Carolina at Charlotte

### FT67.1 *Does error-driven learning occur in the absence of cues? Examination of the effects of updating connection weights to absent cues*

Presenting Author: **Dr Jessie S. Nixon**

**Jessie S. Nixon:** Universität Tübingen; **Sanne Poelstra:** University of Groningen; **Jacolie van Rij:** University of Groningen

### FT67.2 *Three systems interact in one-shot reinforcement learning*

Presenting Author: **Amy R Zou**

**Amy R Zou:** University of California, Berkeley; **Anne GE Collins:** UC Berkeley

### FT67.3 *Modelling Dual-Processes in a Connectionist Network*

Presenting Author: **Mr Toby D Johnson**

**Toby D Johnson:** University of Exeter; **IPL McLaren:** University of Exeter

### FT67.4 *Modeling the Learning and Use of Probability Distributions in Chimpanzees and Humans*

Presenting Author: **Ardavan Nobandegani**

**Thomas Shultz:** McGill University; **Ardavan S. Nobandegani:** McGill University

### FT67.5 *Contingency learning decreases when associations are shared*

Presenting Author: **Brady R. T. Roberts**

**Brady R. T. Roberts:** University of Waterloo; **Noah Forrin:** McMaster University; **David McLean:** University of Waterloo; **Colin M. MacLeod:** University of Waterloo

### FT67.6 *Machines and Molds: An Exploration of Bainless Cognition*

Presenting Author: **Ms. Laurie E O'Neill**

**Laurie E O'Neill:** Muhlenberg College; **Alexandra K Frazer:** Muhlenberg College

### FT68.1 *Bridging the prosody GAP: Genetic Algorithm with People to efficiently sample emotional prosody*

Presenting Author: **Pol van Rijn**

**Pol van Rijn:** Max Planck Institute for Empirical Aesthetics; **Harin Lee:** Max Planck Institute for Human Cognitive and Brain Sciences; **Nori Jacoby:** Max Planck Institute for Empirical Aesthetics

### FT68.2 *Angry, sad, or scared? Within-valence mapping of emotion words to facial and body cues in 2- to 4-year old children*

Presenting Author: **Yang Wu**

**Yang Wu:** Stanford University; **Hannah Matteson:** Stanford University; **Claire M. Baker:** Stanford University; **Michael C. Frank:** Stanford University

### FT68.3 *A Bayesian Drift-Diffusion Model of Schachter-Singer's Two-Factor Theory of Emotion*

Presenting Author: **Lance Ying**

**Lance Ying:** University of Michigan ; **Audrey Michal:** University of Michigan; **Jun Zhang:** University of Michigan

### FT68.4 *Emotions, age, and subjective probability in children*

Presenting Author: **Lara Bertram**

**Lara Bertram:** University of Surrey; **Jonathan D. Nelson:** University of Surrey; **Azzurra Ruggeri:** Max Planck Institute for Human Development

### FT68.5 *The demographics of pain: How age, race, and gender affect pain assessments*

Presenting Author: **Nicole Steiner**

**Nicole Steiner:** The University of Texas at Austin; **Katharine A Tillman:** UT Austin

### FT62.6 *Spatial alignment facilitates visual comparison in diagonal structures*

Presenting Author: **Bryan Matlen**

**Bryan Matlen:** WestEd; **Steven Franconeri:** Northwestern University; **Dedre Gentner:** Northwestern University; **Benjamin Jee:** Worcester State University; **Nina Simms:** Northwestern University

### FT69.1 *Epistemic Cultural Constraints on the Uses of Psychology*

Presenting Author: **Dr Rami Gabriel**

**Rami Gabriel:** Columbia College Chicago

### FT69.2 *Hering's opponent-colors theory fails a key test in a non-Western culture*

Presenting Author: **Bevil R Conway**

**Bevil Conway:** National Eye Institute and National Institute of Mental Health; **Saima Malik-Moraleda:** Harvard University; **Edward Gibson:** Massachusetts Institute of Technology

### FT69.3 *Rates of gender representation in children's literature across cultures: A comparison of US vs. Chinese children's books*

Presenting Author: **Tianlin Wang**

**Qi Sun:** SUNY at Albany; **Ching-I Huang:** SUNY at Albany; **Kennedy Casey:** University of Chicago; **Matthew Cooper Borkenhagen:** University of Wisconsin-Madison; **Tianlin Wang:** University at Albany-SUNY

### FT69.4 *What creates violations of linguistic universals? Correlates of linguistic rarities and their importance in studying linguodiversity*

Presenting Author: **Arturs Semenuks**

**Arturs Semenuks:** University of California, San Diego

### FT69.5 *Familial Guilt: A Cross-Society Comparison of Judgments of Collective Family Responsibility*

Presenting Author: **Junho Lee**

**Junho Lee:** University of California, Los Angeles; **Keith Holyoak:** University of California, Los Angeles

### FT69.6 *Nature in the Balance: Symmetry in perceived human-nature relations predicts pro-environmental attitudes*

Presenting Author: **Joan Kim**

**Joan Kim:** Northeastern University; **John D Coley:** Northeastern University

### FT70.1 *The role of predictability and sense of agency in time estimation*

Presenting Author: **Tsuyoshi Kohatsu**

**Tsuyoshi Kohatsu:** University of the Basque Country ; **Sho Akamine:** Max Planck Institute for Psycholinguistics; **Akari Omine:** transcocosmos inc.; **Manami Sato:** Okinawa International University

### FT70.2 *How people use the past as cues to the present*

Presenting Author: **Ms Mahi K Luthra**

**Mahi K Luthra:** Indiana University; **Peter M. Todd:** Indiana University, Bloomington

### FT70.3 *Comparing Impact of Time Lag and Item Lag in Relative Judgment of Recency*

Presenting Author: **Zoran Tiganj**

**Sahaj Singh Maini:** Indiana University; **Louis Francis Labuzienski:** Indiana University ; **Saurabh Gulati:** Indiana University Bloomington; **Zoran Tiganj:** Indiana University Bloomington

### FT70.4 *Contrasting the semantic typology biases of Deaf and hearing people in their conceptualization of time and space*

Presenting Author: **Roberto Aguirre**

**María Noel Macedo:** Universidad de la República; **Matías M Yerro Avincetto:** IPSIBAT (CONICET-UNMDP-CIC); **Jorge Ricardo Vivas Dr.:** (CONICET-UNMDP-CIC); **Alejandro Fojo:** Universidad de la República; **Adriana de León:** Universidad de la República; **Maximiliano Meliande:** Universidad de la República; **Roberto Aguirre:** Universidad de la República

### FT70.5 *No evidence for short-timescale temporal declines in expectations within a controlled cognitive task*

Presenting Author: **Daniel Bennett**

**Daniel Bennett:** Monash University

### FT70.6 *Sensitivity to time discrepancy: A computational model of human response to expectancy disconfirmation*

Presenting Author: **Yuki Sasamoto**

**Yuki Sasamoto:** Fujitsu; **Daichi Katsura:** Fujitsu; **Shinji Hotta:** Fujitsu; **Satoshi Amemiya:** Fujitsu; **Kensuke Kuraki:** Fujitsu; **Naoyuki Sawasaki:** Fujitsu; **Akihiro Inomata:** Fujitsu

### FT71.1 *Self-report vs. objective data. What impact of monitoring on smartphone use regulation?*

Presenting Author: **Martin Ragot**

**Jean-Marc Josset:** b<>com; **Risienne Mazengani:** University of Paris-Saclay; **Martin Ragot:** b<>com



### FT71.2 Predicting Individual Discomfort in Autonomous Driving

Presenting Author: **MSc. Sara Todorovikj**

**Sara Todorovikj**: University of Technology Chemnitz; **Felix Kettner**: University of Technology Chemnitz; **Daniel Brand**: Chemnitz University of Technology; **Matthias Beggato**: Chemnitz University of Technology; **Marco Ragni**: TU Chemnitz

### FT71.3 People's evaluation of programs that drive agents' behavior

Presenting Author: **Eric Bigelow**

**Eric Bigelow**: Harvard University; **Tomer D. Ullman**: Harvard University

### FT71.4 Children as Design Partners: Digital Media, Learning Analytics, and Metacognition

Presenting Author: **Leanne Ma**

**Leanne Ma**: OISE/University of Toronto

### FT71.5 Who owns your information? Young children's judgments of who owns the general and personal information users share with apps.

Presenting Author: **Shaylene E Nancekivell**

**Shaylene E Nancekivell**: University of North Carolina at Greensboro; **Jason B Fahey**: University of North Carolina at Greensboro

### FT71.6 Toward Digital Transformation of Personality Questionnaire: Development of Digitalized Questionnaires and Correlation Analysis between Personality Traits and Reactions Obtained during answering the Questionnaires

Presenting Author: **Takashi Numata**

**Takashi Numata**: Hitachi, Ltd.; **Yasuyuki Kudo**: Hitachi, Ltd.; **Takeshi Kato**: Kyoto University; **Michihiro Kaneko**: Kyoto University; **Michio Nomura**: Kyoto University; **Yusuke Moriguchi**: Kyoto University; **Ryuji Mine**: Kyoto University

### FT72.1 Controlling the narrative: Euphemistic language affects judgments of actions while avoiding perceptions of dishonesty

Presenting Author: **Mr. Alexander C. Walker**

**Alexander C. Walker**: University of Waterloo; **Martin Turpin**: University of Waterloo; **Ethan Meyers**: University of Waterloo; **Jennifer Stolz**: University of Waterloo; **Jonathan Fugelsang**: University of Waterloo; **Derek Koehler**: University of Waterloo

### FT72.2 Constructing positive illusions in close relationships through latent-cause inference

Presenting Author: **Yeon Soon Shin**

**Yeon Soon Shin**: Yale University; **Molly J Crockett**: Yale University

### FT72.3 Do children interpret costs as signals of commitment to groups?

Presenting Author: **Emily Gerdin**

**Emily Gerdin**: Yale University; **Yarrow Dunham**: Yale University

### FT72.4 "He only changed his answer because they shouted at him": children use affective cues to distinguish between genuine and forced consensus

Presenting Author: **Emory Richardson**

**Emory Richardson**: Yale University; **Frank Keil**: Yale University

### FT72.5 Inferences from Disagreement

Presenting Author: **Dr. Jamie Amemiya**

**Jamie Amemiya**: University of California, San Diego; **Gail D. Heyman**: UC San Diego; **Tobias Gerstenberg**: Stanford University

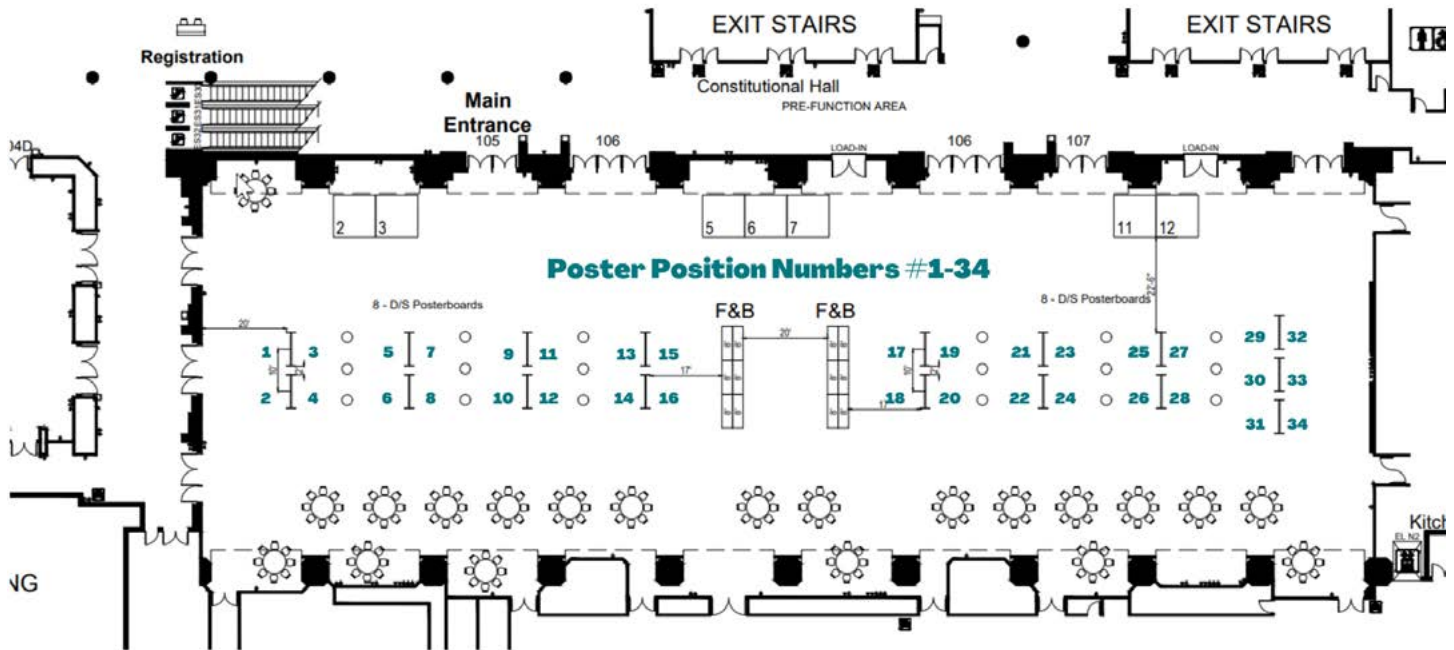
### FT72.6 Can Children Detect Fake News?

Presenting Author: **Andrew G Young**

**Shiao Xu**: Occidental College; **Andrew Shtulman**: Occidental College; **Andrew G Young**: Northeastern Illinois University



## POSTER SESSIONS



Eight poster sessions are happening throughout the CogSci 2022 Conference in Constitution Hall (105-107, North Building at the Metro Toronto Convention Centre). Posters are grouped into rough themes.

Poster numbers are PX-XX-XXXX. The first number after P, identifies the poster session you're assigned to. The 2nd two-digit number is the location of the poster in the hall. This number can be 1 through 34 and identifies exactly where you are in the hall. The final four-digit number is the unique poster/paper ID number.

### POSTER SESSION 1 - EDUCATION, LANGUAGE ACQUISITION, AND DEVELOPMENT

JULY 28TH, 2022 - 10:20 - 12:00

#### P1-1-2203 *Infants infer motor competence from differences in agent-specific relative action costs*

Presenting Author: Barbara Pomiechowska

Barbara Pomiechowska: Central European University; Gergely Csibra: Central European University

#### P1-2-1745 *When close isn't enough: Semantic similarity does not facilitate cross-situational word-learning*

Presenting Author: Alexander S LaTourrette

Alexander S LaTourrette: University of Pennsylvania; Charles Yang: U Penn; John Trueswell: University of Pennsylvania

#### P1-3-2362 *Evaluating unsupervised word segmentation in adults: a meta-analysis*

Presenting Author: Joshua K Hartshorne

Wesley Ricketts: Boston College; Joshua K Hartshorne: Boston College

#### P1-4-2311 *How Stimuli Availability Effects Novel Noun Generalization in a Free-Choice Design.*

Presenting Author: Eleanor Stansbury

Eleanor Stansbury: Université Bourgogne Franche Comté; Arnaud Witt: University of Bourgogne Franche-Comté; Jean-Pierre Thibaut: Université Bourgogne Franche Comté

#### P1-5-1198 *The role of vocabulary and executive functions in the comparison process for novel word generalization*

Presenting Author: Ph.D. Student Yannick Lagarrigue

Yannick Lagarrigue: University of Bourgogne Franche-Comté; Jean-Pierre Thibaut: University of Bourgogne Franche-Comté

**P1-6-2055** *How words can be learned by observation depends on what is meant by “learned”*

Presenting Author: **Nina Schoener**

**Nina Schoener**: University of Connecticut; **Sara Johnson**: University of Connecticut; **Sumarga H. Suanda**: University of Connecticut

**P1-7-1799** *Visual attention and language exposure during everyday activities: an at-home study of early word learning using wearable eye trackers*

Presenting Author: **Sara E Schroer**

**Sara E Schroer**: UT Austin; **Ryan E Peters**: Duolingo; **Alyssa Yarbrough**: UT Austin; **Chen Yu**: University of Texas at Austin

**P1-8-1457** *Is the learning of artificial phonotactic rules interfered with by the concurrent experience of English?*

Presenting Author: **Suyeon Hwang**

**Suyeon Hwang**: University of Illinois, Urbana-Champaign; **Gary Dell**: University of Illinois; **Cynthia Fisher**: University of Illinois, Urbana-Champaign

**P1-9-1801** *The role of top-down attention in statistical learning of speech*

Presenting Author: **Stacey Reyes**

**Stacey Reyes**: Western University; **Laura Batterink**: Western University

**P1-10-1798** *Can children recognize pedagogical intent in the prosody of speech?*

Presenting Author: **Igor Bascandzic**

**Igor Bascandzic**: Harvard Graduate School of Education; **Michael LaSorsa**: Rutgers University, Newark; **Patrick Shafto**: Rutgers University, Newark; **Elizabeth Bonawitz**: Harvard Graduate School of Education

**P1-11-2378** *Preschoolers’ sensitivity to abstract correlations in the properties of sets and functions*

Presenting Author: **Nicole Coates**

**Nicole Coates**: Massachusetts Institute of Technology; **Max Siegel**: MIT; **Junyi Chu**: Massachusetts Institute of Technology; **Melissa Kline**: MIT; **Josh Tenenbaum**: MIT; **Laura Schulz**: Massachusetts Institute of Technology

**P1-12-2194** *Uncovering Childrens’ Category Representations with MCMCP*

Presenting Author: **Pablo Leon Villagra**

**Pablo Leon Villagra**: Brown University; **Isaac Ehrlich**: University of Toronto; **Chris Lucas**: University of Edinburgh; **Daphna Buchsbaum**: Brown University

**P1-13-1884** *Developmental changes in the semantic part structure of drawn objects*

Presenting Author: **Holly Huey**

**Holly Huey**: University of California, San Diego; **Bria Long**: Stanford University; **Justin Yang**: University of California, San Diego; **Kaylee R George**: Stanford University; **Judith E. Fan**: University of California, San Diego

**P1-14-2162** *Not just if, but how much: Children and adults use cost and need to make evaluations about generosity across contexts*

Presenting Author: **Mia Radovanovic**

**Mia Radovanovic**: University of Toronto; **Emily Onyshko**: University of Toronto; **Tri Quang Huynh**: University of Toronto; **Yang Leona Liu**: University of Toronto; **Tim Wei-Ting Chao**: University of Toronto; **Jessica Sommerville**: University of Toronto

**P1-15-1846** *What to Do When Someone Expresses a Misconception? A Cross-Cultural Examination of Children’s White Lie-Telling Behaviour*

Presenting Author: **Roksana Aleksandra Dobrin-De Grace**

**Roksana Aleksandra Dobrin-De Grace**: Toronto Metropolitan University; **Lili Ma**: Toronto Metropolitan University

**P1-16-1194** *Is there an Own-Age Advantage in Talker Recognition?*

Presenting Author: **Madeleine Yu**

**Madeleine Yu**: University of Toronto; **Elizabeth Johnson**: University of Toronto

**P1-17-1733** *Reasoning About Specific Relations Versus General Associations Shows Protracted Development Throughout Adolescence*

Presenting Author: **Alexander W McArthur**

**Alexander W McArthur**: University of Toronto; **Katharine F. Guarino**: Loyola University Chicago; **Alison Preston**: University of Texas at Austin; **Margaret L Schlichting**: University of Toronto

**P1-18-2095** *Zero in on This: Children are Exposed to Various Concepts of “Zero” Prior to Age Six*

Presenting Author: **Nicholas A Vest**

**Nicholas A Vest**: University of Wisconsin-Madison; **Haley Weaver**: University of Wisconsin-Madison; **Martha W Alibali**: University of Wisconsin-Madison

**P1-19** *Vacant*

**P1-20-1829** *How do young children interpret conditionals?*

Presenting Author: **Ms/Miss Amina A Shmanova**

**Amina A Shmanova**: University of Toronto; **Myrto Grigoroglou**: University of Toronto; **Patricia Ganea**: University of Toronto

## P1-21-2342 *Developmental changes in children's training strategies*

Presenting Author: **Daniil Serko**

**Daniil Serko**: Max Planck Institute for Human Development; **Julia Anne Leonard**: Yale University; **Azzurra Ruggeri**: Max Planck Institute for Human Development

## P1-22-1938 *Adaptive Learning Technology based on Working Memory Capacity*

Presenting Author: **Salomé Cojean**

**Salomé Cojean**: Univ. Grenoble Alpes; **Nicolas Martin**: LIG

## P1-23-1679 *Test Before Study: Maximizing Adaptive Learning Gains using Prior Knowledge Assessment*

Presenting Author: **Mr. Thomas Jan Wilschut**

**Thomas Jan Wilschut**: University of Groningen; **Florian Sense**: University of Groningen; **Maarten van der Velde**: University of Groningen; **Hedderik van Rijn**: University of Groningen

## P1-24-1888 *Investigating Expert and Novice Programming Problem Solving*

Presenting Author: **Maria Vorobeve**

**Maria Vorobeve**: Carleton University; **Kasia Muldner**: Carleton University

## P1-25-2261 *Inhibition and Fraction Arithmetic: Insights from Heat-map Strategy Reports*

Presenting Author: **Freya Kaur**

**Freya Kaur**: University of Maryland, Baltimore County; **Charles J Fitzsimmons**: Kent State University; **Yuika Iwai**: University of Maryland, Baltimore County; **Jennifer M. Taber**: Kent State University; **Clarissa A Thompson**: Kent State University; **Karrie E. Godw**

## P1-26-1990 *Extending the Predictive Performance Equation to Account for Multivariate Performance*

Presenting Author: **Mr Michael Gordon Collins**

**Michael Gordon Collins**: Air Force; **Florian Sense**: InfiniteTactics LLC; **Michael Krusmark**: L-3 Communications; **Tiffany Jastrzembski**: Wright-Patterson Air Force Base

## P1-27 *Vacant*

## P1-28-1610 *Investigating the utility of peer tutoring for learning the skill of code tracing*

Presenting Author: **Ronessa Dass**

**Ronessa Dass**: Carleton University; **Kasia Muldner**: Carleton University

## P1-29-1232 *Acceptability of technology involving artificial intelligence among future teachers*

Presenting Author: **Salomé Cojean**

**Salomé Cojean**: Univ. Grenoble Alpes; **Nicolas Martin**: LIG

## P1-30-2018 *Reading left-to-right and right-to-left orthographies: Ocular prevalence and hemispheric priority for orthographic conventions*

Presenting Author: **Ruomeng Zhu**

**Ruomeng Zhu**: The University of Edinburgh; **Mateo Obregón**: The University of Edinburgh; **Hamutal Kreiner**: Ruppin Academic Center; **Richard Shillcock**: The University of Edinburgh

## POSTER SESSION 2 - NUMBER, CAUSE, EMOTION, SPACE, AND TIME

JULY 28TH, 2022 – 13:00 – 14:40

## P2-1-1113 *Symmetry as a Representation for Intuitive Geometry?*

Presenting Author: **Wangcheng Xu**

**Wangcheng Xu**: Georgia Institute of Technology; **Snejana Shegheva**: Georgia Institute of Technology; **Ashok K. Goel**: Georgia Institute of Technology

## P2-2-2022 *Cognitive and Emotional Impact of Politically-polarized Internet Memes About Climate Change*

Presenting Author: **Emily Wong**

**Emily Wong**: University of California, Los Angeles; **Keith Holyoak**: University of California, Los Angeles; **Hunter Priniski**: UCLA

## P2-3 *Vacant*

## P2-5-1795 *Interaction dynamics affect the emergence of compositional structure in cultural transmission of space-time mappings*

Presenting Author: **Dr. Tessa Verhoef**

**Tessa Verhoef**: Leiden University; **Esther Walker**: -; **Tyler Marghetis**: University of California, Merced

## P2-6-1928 *Relative Numerical Context Affects Temporal Processing*

Presenting Author: **Mr Anuj Shukla**

**Anuj Shukla**: Thapar Institute of Engineering & Technology; **Raju Surampudi Bapi**: IIIT Hyderabad

## P2-7-1845 *Relationship of time perception with working memory and number sense using gaussian process regresion*

Presenting Author: **Kamil Szymanski**

**Kamil Szymanski**: SWPS University of Social Sciences and Humanities

**P2-8-1643 *Deus ex Machina: The Influence of COVID-19 Pandemic on the Young Adults' Religiosity, Temporal Values, and Time Spatialization across Cultures***

*Presenting Author:* **Carmen Callizo-Romero**

**Carmen Callizo-Romero:** University of Granada; **Daniel Casasanto:** Cornell University; **Sobh Chahboun:** Queen Maud University College; **Tilbe Gökşun:** Koç University; **Yan Gu:** UCL; **Alexander Kranjec:** Duquesne University; **Marc Ouellet:** University of Granada; **Slavi**

**P2-9-1712 *Spatial organization of tactile localization in adults***

*Presenting Author:* **Professor Jeffrey J Lockman**

**Katarina Patton:** Tulane University; **Lisa K Chinn:** University of Houston; **Jeffrey J Lockman:** Tulane University

**P2-10-1797 *Graphicacy skills across ages and cultures: a new assessment tool of intuitive statistics' abilities***

*Presenting Author:* **Lorenzo Ciccione**

**Lorenzo Ciccione:** Collège de France - PSL University; **Stanislas Dehaene:** Neurospin/CEA, Collège de France - PSL University

**P2-11-1440 *Perceptual Features in Visual Representations: A Content Analysis of Inheritance Diagrams***

*Presenting Author:* **Olympia N. Mathiaparanam**

**Olympia N. Mathiaparanam:** University of Rochester; **Andrea Donovan:** University of Wisconsin- Madison; **David Menendez:** University of Wisconsin - Madison; **Collin Jones:** University of Rochester; **Seung Heon Yoo:** University of Rochester; **Martha W Alibali:** Unive

**P2-12-2288 *A model of path integration that connects neural and symbolic representation***

*Presenting Author:* **Nicole Sandra-Yaffa Dumont**

**Nicole Sandra-Yaffa Dumont:** University of Waterloo; **Jeff Orchard:** University of Waterloo; **Chris Eliasmith:** University of Waterloo

**P2-13-1387 *Learning Causal Overhypotheses through Exploration in Children and Computational Models***

*Presenting Author:* **Eliza Kosoy**

**Eliza Kosoy:** UC Berkeley ; **Adrian Liu:** UC Berkeley; **Jasmine Collins:** UC Berkeley; **David M Chan:** University of California, Berkeley; **Jessica Hamrick:** DeepMind; **Sandy Han Huang:** DeepMind; **Nan Rosemary Ke:** Deepmind, Mila; **Bryanna Skye Kaufmann:** UC Berkeley;

**P2-14-1234 *Explaining Full Response Distributions in Causal Reasoning Tasks: The Bayesian Mutation Sampler***

*Presenting Author:* **Ivar R Kolvoort**

**Ivar R Kolvoort:** University of Amsterdam; **Leendert van Maanen:** Utrecht University

**P2-15-1468 *Intuitions and Perceptual Constraints on Causal Learning from Dynamics***

*Presenting Author:* **Tianwei Gong**

**Tianwei Gong:** University of Edinburgh; **Neil R Bramley:** University of Edinburgh

**P2-16-1550 *Absence Makes the Trust in Causal Models Grow Stronger***

*Presenting Author:* **Samantha Kleinberg**

**Samantha Kleinberg:** Stevens Institute of Technology; **Eren Alay:** Stevens Institute of Technology; **Jessecas K. Marsh:** Lehigh University

**P2-17-1547 *Using efficiency to infer the quality of machines***

*Presenting Author:* **Claudia G. Sehl**

**Claudia G. Sehl:** University of Waterloo; **Stephanie Denison:** University of Waterloo ; **Ori Friedman:** University of Waterloo

**P2-18-1946 *Powering up causal generalization: A model of human conceptual bootstrapping with adaptor grammars***

*Presenting Author:* **Bonan Zhao**

**Bonan Zhao:** University of Edinburgh; **Neil R Bramley:** University of Edinburgh; **Chris Lucas:** University of Edinburgh

**P2-19-2241 *That was close! A counterfactual simulation model of causal judgments about decisions***

*Presenting Author:* **Sarah Wu**

**Sarah Wu:** Stanford University; **Shruti Sridhar:** Stanford University; **Tobias Gerstenberg:** Stanford University

**P2-20-1398 *Self-Explanation of Worked Examples Integrated in an Intelligent Tutoring System Enhances Problem Solving and Efficiency in Algebra***

*Presenting Author:* **Nicholas A Vest**

**Nicholas A Vest:** University of Wisconsin- Madison; **Elena Marie Silla:** University of Delaware; **Anna N. Bartel:** University of Wisconsin, Madison; **Tomohiro Nagashima:** Carnegie Mellon University; **Vincent Aleven:** Carnegie Mellon University; **Martha W Alibali:** University of Wisconsin-Madison

**P2-21-2049 *Explain with, rather than explain to: How explainees shape their learning***

*Presenting Author:* **Josephine Beryl Fisher**

**Josephine Beryl Fisher:** University Paderborn; **Katharina Rohlfing:** Paderborn University; **Ed Donnellan:** University College London; **Angela Griminger:** Paderborn University; **Yan Gu:** UCL; **Gabriella Vigliocco:** University College London



**P2-22-1453** *Lightness constancy in reality, in virtual reality, and on flat-panel displays*

Presenting Author: **Khushbu Patel**

**Khushbu Patel**: York University; **Laurie M Wilcox**: York University; **Laurence T Maloney**: New York University; **Krista A. Ehinger**: The University of Melbourne; **Jaykishan Patel**: York University; **Emma Wiedenmann**: York University; **Richard Murray**: York University

**P2-23-1115** *Exploring perceptual decoupling in the context of smooth pursuit eye movement*

Presenting Author: **Ziva Korda**

**Ziva Korda**: University of Graz; **Sonja Annerer-Walcher**: University of Graz; **Christof Koerner**: University of Graz; **Mathias Benedek**: University of Graz

**P2-24-2313** *Joint online inference of material properties and object shape*

Presenting Author: **Vivian C. Paulun**

**Vivian C. Paulun**: Massachusetts Institute of Technology; **Max Siegel**: MIT; **Josh Tenenbaum**: MIT

**P2-25-2184** *Benchmarking mid-level vision with texture-defined 3D objects*

Presenting Author: **Yoni Friedman**

**Yoni Friedman**: MIT; **Thomas O'Connell**: MIT; **Max Siegel**: MIT; **Daniel M Bear**: Stanford University; **Tuan Anh Le**: MIT; **Bernhard Egger**: Friedrich-Alexander-Universität Erlangen-Nürnberg; **Josh Tenenbaum**: MIT

**P2-26-1775** *Generalizing physical prediction by composing forces and objects*

Presenting Author: **Haoliang Wang**

**Haoliang Wang**: University of California, San Diego; **Kelsey R Allen**: DeepMind; **Ed Vul**: University of California, San Diego; **Judith E. Fan**: University of California, San Diego

**P2-27-2250** *Can Adults Revise Their Core Beliefs about Objects?*

Presenting Author: **Rongzhi Liu**

**Rongzhi Liu**: University of California, Berkeley; **Fei Xu**: UC Berkeley

**P2-28-1516** *What is Noise Music? A Psychometric Approach*

Presenting Author: **Pavan Brar**

**Pavan Brar**: Duquesne University; **James Schreiber**: Duquesne University; **Alexander Kranjec**: Duquesne University

**P2-29-1126** *Trait mindfulness is associated with dynamic transitions in a combination of affective qualities*

Presenting Author: **Mr Winson Fu Zun Yang**

**Winson Fu Zun Yang**: Texas Tech University; **Miranda Scolari**: Texas Tech University

**P2-30-2013** *Affect and grammatical anomaly in discourse*

Presenting Author: **Prof Veena Dhar Dwivedi**

**Veena Dhar Dwivedi**: Brock University

**P2-31-1375** *Looking for a second opinion: Epistemic emotions and the exploration of information sources*

Presenting Author: **Michael Slinger**

**Michael Slinger**: Dalhousie University; **Stanka A. Fitneva**: Queen's University

**P2-32-1171** *Investigating Adults' Strategy Use During Proportional Comparison*

Presenting Author: **Michelle Hurst**

**Michelle Hurst**: University of Chicago; **Steven Piantadosi**: UC Berkeley

**POSTER SESSION 3 - DECISION MAKING, ATTENTION, PLANNING, AND SEARCH**

**JULY 28TH, 2022 – 15:00 – 16:40**

**P3-1 Vacant**

**P3-2-1684** *What causes enhanced processing of high-value items?*

Presenting Author: **Nikolas McNeal**

**Nikolas McNeal**: The Ohio State University; **Blair Shevlin**: The Ohio State University; **Ian Krajchich**: The Ohio State University

**P3-3-1362** *Exploring the Structure of Predecisional Information Search in Risky Choice*

Presenting Author: **Dr. Florian Bolenz**

**Florian Bolenz**: Max Planck Institute for Human Development; **Thorsten Pachur**: Max Planck Institute for Human Development

**P3-4-1337** *Individuals with Mild Cognitive Impairment are impaired in a gambling task*

Presenting Author: **Jeffrey Zemla**

**Jeffrey Zemla**: Syracuse University

**P4-5 Vacant**

**P3-6-1709** *Effects of reward schedule and pressure on procrastination*

Presenting Author: **PhD candidate Peiyuan Zhang**

**Peiyuan Zhang**: New York University; **Yijun Lin**: University of Florida; **Wei Ji Ma**: New York University

**P3-7-1891** *Procrastination and the Intention-Behavior Gap*

Presenting Author: **Luísa Leonelli de Moraes**

**Luísa Leonelli de Moraes**: New York University; **Peiyuan Zhang**: New York University; **Yijun Lin**: University of Florida; **Wei Ji Ma**: New York University



### **P3-8-1306** *Does Mental Effort Avoidance Depend on the 'Type of Effort'?*

Presenting Author: **Jake Ryan Embrey**

**Jake Ryan Embrey**: The University of New South Wales; **Chris Donkin**: UNSW; **Ben Newell**: University of New South Wales

### **P3-9-1403** *Analyzing the Effect of External Environments on Mind Wandering during a Perceptual-Motor Task*

Presenting Author: **Kazuma Nagashima**

**Ryo Yoneda**: Shizuoka University; **Jumpei Nishikawa**: Shizuoka University; **Kazuma Nagashima**: Shizuoka University; **Junya Morita**: Shizuoka University; **Tetsuya Terada**: Mazda Motor Corporation

### **P3-10-1204** *Order effects in choice are selectively modulated by cognitive load*

Presenting Author: **Rahul Bhui**

**Rahul Bhui**: MIT

### **P3-11-1437** *User-Generated Star Ratings Are Not Inherently Comparable: How Star Ratings Structure Leads to Poor Choices*

Presenting Author: **Matt Meister**

**Matt Meister**: University of Colorado Boulder; **Nicholas Reinholdt**: University of Colorado Boulder

### **P3-12-2322** *How Do People Use Star Rating Distributions?*

Presenting Author: **Jingqi Yu**

**Jingqi Yu**: University of Toronto; **David Landy**: Netflix; **Robert Goldstone**: Indiana University

### **P3-13-2187** *The Influence of Mean Product Ratings on Review Judgments and Search*

Presenting Author: **Daniel Katz**

**Daniel Katz**: University of Chicago; **Daniel Bartels**: University of Chicago

### **P3-14-1082** *Problematic Smartphone Usage, Objective Smartphone Engagement, and Executive Functions: A Latent Variable Analysis*

Presenting Author: **Dr Andree Hartanto**

**Andree Hartanto**: Singapore Management University; **Yi Jing Chua**: Singapore Management University; **Frosch Y. X. Quek**: Singapore Management University; **Joax Wong**: Singapore Management University; **Nadyanna M Majeed**: Singapore Management University; **Wei Ming O**

### **P3-15-2201** *Towards metacognitive learning in depression*

Presenting Author: **Miss Anne Lene Sax**

**Anne Lene Sax**: University of Bristol

### **P3-16-1318** *Fun as maximizing learnability: Balancing difficulty and prior knowledge*

Presenting Author: **Franziska Brändle**

**Franziska Brändle**: Max Planck Institute for Biological Cybernetics; **Charley M Wu**: University of Tübingen; **Eric Schulz**: Max Planck Institute for Biological Cybernetics

### **P3-17-1894** *Handedness and Creativity: Facts and Fictions*

Presenting Author: **Mr. Owen P Morgan**

**Owen P Morgan**: Cornell University; **Daniel Casasanto**: Cornell University

### **P3-18-1740** *Do we mostly use only 10% of our brain? Prevalence and correlates of misconceptions on creativity and neuroscience in a culturally diverse sample.*

Presenting Author: **Simon Ceh**

**Simon Ceh**: University of Graz; **Izabela Lebeda**: University of Wrocław; **Mathias Benedek**: University of Graz

### **P3-19-1726** *A process-oriented approach to creative metacognition*

Presenting Author: **Mathias Benedek**

**Mathias Benedek**: University of Graz; **Izabela Lebeda**: University of Graz

### **P3-20-1250** *Generating and evaluating hypothesis testing strategies*

Presenting Author: **Aba Szollosi**

**Aba Szollosi**: University of Edinburgh; **Neil R Bramley**: University of Edinburgh

### **P3-21-1080** *Familiarity plays a unique role in increasing preferences for battery electric vehicle adoption*

Presenting Author: **Alexandre L. S. Filipowicz**

**Alexandre L. S. Filipowicz**: Toyota Research Institute; **Matthew L Lee**: Toyota Research Institute; **David A. Shamma**: Toyota Research Institute; **Shabnam Hakimi**: Toyota Research Institute; **Scott Carter**: Toyota Research Institute; **Rumen Iliev**: Toyota Research I

### **P3-22-1444** *A Resource-Rational Process Model of Violation of Cumulative Independence*

Presenting Author: **Ardavan S. Nobandegani**

**Yiwei Cao**: McGill University; **Ardavan S. Nobandegani**: McGill University; **Thomas Shultz**: McGill University

### **P3-23-1441** *A Resource-Rational Process-Level Account of Violation of Stochastic Dominance*

Presenting Author: **Ardavan S. Nobandegani**

**Feng Xia**: McGill University; **Ardavan S. Nobandegani**: McGill University; **Thomas Shultz**: McGill University; **Rahul Bhui**: MIT

**P3-24-1116** *Choice blindness persists despite explicit instructions to detect false feedbacks: preliminary evidence for a Bayesian model of choice blindness*

Presenting Author: **Vogel Gabriel**

**Vogel Gabriel**: Lund University; **Petter Johansson**: Department of Philosophy and Cognitive Science; **Lars Hall**: Lund University; **Philip Parnamets**: New York University

**P3-25-1697** *Formalization and Implementation of ViolEx: An Active Inference perspective*

Presenting Author: **Mr Dhanaraaj Raghuveer**

**Dhanaraaj Raghuveer**: Philipps-Universitaet; **Dominik M Endres**: Philipps-Universitaet

**P3-26-2185** *Dynamic Strategy Selection in Active Function Learning*

Presenting Author: **Rebekah Gelpi**

**Nayan Saxena**: University of Toronto; **Rebekah Gelpi**: University of Toronto; **Daphna Buchsbaum**: Brown University; **Chris Lucas**: University of Edinburgh

**P3-27-1524** *Probability matching and antimatching in hide-and-seek*

Presenting Author: **Peter DiBerardino**

**Peter DiBerardino**: University of Waterloo; **Britt Anderson**: University of Waterloo

**P3-28-2251** *The shape of option generation in open-ended decision problems*

Presenting Author: **Jonathan Phillips**

**Gokul Srinivasan**: Dartmouth College; **Jane Acierno**: Dartmouth College; **Jonathan Phillips**: Dartmouth College

**P3-29-2057** *Evidence for Dynamic Consideration Set Construction in Open-Ended Problems*

Presenting Author: **Jonas Nelle**

**Jonas Nelle**: Harvard University; **Fiery Cushman**: Harvard University

**P3-30-1548** *Open System Model of Choice and Response Time*

Presenting Author: **Gunnar Epping**

**Gunnar Epping**: Indiana University Bloomington; **Peter Kvam**: University of Florida; **Tim Pleskac**: University of Kansas; **Jerome Busemeyer**: Indiana University

**P3-31-1011** *Attentional Momentum Effects on Addition Verification*

Presenting Author: **Taylor Paige Guba**

**Taylor Paige Guba**: University of Delaware; **Emily R. Fyfe**: Indiana University

**P3-32-2035** *Statistical Learning Guides Auditory Attention*

Presenting Author: **Austin Luor**

**Austin Luor**: Carnegie Mellon University; **Frederic Dick**: Birkbeck & UCL; **Barbara Shinn-Cunningham**: Carnegie Mellon University; **Lori L Holt**: Carnegie Mellon University

**P3-33-1792** *Measuring social curiosity-driven attentional differences in children with autism using an augmented reality-based phone app*

Presenting Author: **Samaher F Radwan**

**Samaher F Radwan**: Stanford University; **Aaron Kline**: Stanford University; **Alejandro Galindo**: Stanford University; **Michael C. Frank**: Stanford University; **Dennis Wall**: Stanford University; **Nick Haber**: Stanford

**POSTER SESSION 4 - SOCIAL COGNITION, MORALITY, AND GROUPS**

**JULY 29TH, 2022 – 8:30 – 10:10**

**P4-1-1546** *Inferring friendships from mutual connections*

Presenting Author: **Claudia G. Sehl**

**Claudia G. Sehl**: University of Waterloo; **Ori Friedman**: University of Waterloo; **Stephanie Denison**: University of Waterloo

**P4-2-2278** *Inferring truth from lies*

Presenting Author: **Lauren A Oey**

**Lauren A Oey**: University of California, San Diego; **Ed Vul**: University of California, San Diego

**P4-3-1650** *Source independence affects argument persuasiveness when the relevance is clear*

Presenting Author: **Manikya Alister**

**Manikya Alister**: The University of Melbourne; **Keith James Ransom**: University of Adelaide; **Andrew Perfors**: University of Melbourne

**P4-4-1881** *Adults' Evaluations of Rote and Reflective Teachers*

Presenting Author: **Ilona Bass**

**Ilona Bass**: Harvard University; **Elizabeth Bonawitz**: Harvard University; **Tomer D. Ullman**: Harvard University

**P4-5-1307** *Representation matters: A PDP model of impression formation and person knowledge*

Presenting Author: **Professor George S Cree**

**George S Cree**: University of Toronto Scarborough; **Ruth M. Yilma**: University of Toronto Scarborough; **Brian Wu**: University of Toronto Scarborough

**P4-6-1948** *Back to the drawing board: Rethinking potential predictors of preschool executive function in low-income South Africa*

Presenting Author: **Caylee Cook**

**Caylee Cook:** University of Witwatersrand

**P4-8-1021** *Comparative Evaluation of Multivariate Coordination Methods to Assess Team Cognition in Multi-Modal Team Interactions.*

Presenting Author: **Elwira A. Halgas**

**Elwira A. Halgas:** Eindhoven University of Technology; **Josette M.P. Gevers:** Eindhoven University of Technology; **Kyana van Eijndhoven:** Tilburg University; **Travis J. Wiltshire:** Tilburg University; **Sonja Rispens:** Eindhoven University of Technology; **Joyce West**

**P4-9-2289** *Reinforcement Learning, Social Value Orientation, and Decision Making: Computational Models and Empirical Validation*

Presenting Author: **Peter Duggins**

**Peter Duggins:** University of Waterloo; **Terrence C Stewart:** University of Waterloo; **Chris Eliasmith:** University of Waterloo

**P4-10-2254** *Willingness to Interact Increases When Opponents Offer Specific Evidence*

Presenting Author: **Xiuyuan Zhang**

**Benjamin F Scheve:** Yale University; **Xiuyuan Zhang:** Yale University; **Frank Keil:** Yale University

**P4-11-1592** *Investigating social norms in nonhuman animals*

Presenting Author: **Kristin Andrews**

**Kristin Andrews:** York University; **Simon Fitzpatrick:** John Carroll University; **Evan Westra:** York University

**P4-12-1649** *Multiple representational theories explain non-human primate perspective-taking: Evidence from computational modeling*

Presenting Author: **Dr. Daniel J. Horschler**

**Daniel J. Horschler:** Yale University; **Marlene Berke:** Yale University; **Laurie Santos:** Yale University; **Julian Jara-Ettinger:** Yale University

**P4-13-2101** *From Neurons to Culture: Applying Newell's Systems Levels to Understanding the Impact of Culture*

Presenting Author: **Mr. Tristan A. Shaeen**

**Robert L West:** Carleton University; **Tristan A. Shaeen:** Carleton University

**P4-14-1519** *Integrating Experience into Bayesian Theory of Mind*

Presenting Author: **Marlene Berke**

**Marlene Berke:** Yale University; **Julian Jara-Ettinger:** Yale University

**P4-15-1217** *Walking in or Talking with Others' Shoes: Studying the Role of Perspective Getting and Mimicry on Interlocutors' Interpersonal Accuracy and Feelings of Empathy*

Presenting Author: **Hendrik Engelbrecht**

**Noa Reijnen:** Tilburg University; **Debby Damen:** Tilburg University; **Hendrik Engelbrecht:** Tilburg University

**P4-16-1663** *Some forms of uncertainty may suppress the evolution of social learning*

Presenting Author: **Matthew Adam Turner**

**Matthew Adam Turner:** Stanford University; **Cristina Moya:** University of California at Davis; **Paul Smaldino:** University of California, Merced; **James Holland Jones:** Stanford University

**P4-17-2200** *Changing Perspectives: Examining Factors Related To Counterfactual Thinking In Ambiguous Social Judgments*

Presenting Author: **Betsy Lehman**

**Betsy Lehman:** Michigan Technological University; **Elizabeth S. Veinott:** Michigan Technological University

**P4-18-1568** *Choices are treated as probabilistic when the outcome is unknown*

Presenting Author: **Tiffany Doan**

**Tiffany Doan:** University of Waterloo; **Ori Friedman:** University of Waterloo; **Stephanie Denison:** University of Waterloo

**P4-19-2170** *Critical transitions in belief and identity*

Presenting Author: **Tyler Marghetis**

**Tyler Marghetis:** University of California, Merced; **Maya A Changaran Kumarath:** University of California Merced; **Eleanor Brower Schille-Hudson:** Indiana University

**P4-20-2009** *People Have Systematically Different Intuitions about Ownership even in Seemingly Simple Cases*

Presenting Author: **Xiuyuan Zhang**

**Xiuyuan Zhang:** Yale University; **Paul Bloom:** University of Toronto; **Julian Jara-Ettinger:** Yale University

**P4-21-1272** *A Bayesian Multilevel Analysis of Belief Alignment Effect Predicting Human Moral Intuitions of Artificial Intelligence Judgements*

Presenting Author: **Ms Yuxin Liu**

**Yuxin Liu:** University of Edinburgh; **Adam Moore:** University of Edinburgh

**P4-22-1565** *Cognitive Models as Simulators: The Case of Moral Decision-Making*

Presenting Author: **Ardavan S. Nobandegani**

**Ardavan S. Nobandegani:** McGill University; **Thomas Shultz:** McGill University; **Irina Rish:** University of Montreal

## P4-23-2270 *Consent and the Doctrine of Double Effect*

Presenting Author: **Jonathan Phillips**

**Joshua Ocampo**: Dartmouth College; **Jonathan Phillips**: Dartmouth College

## P4-24-2070 *Expectations bias moral judgments*

Presenting Author: **Brittany Schotsch**

**Derek Powell**: Arizona State University; **Brittany Schotsch**: Arizona State University; **Justin Mikell**: Arizona State University; **Zachary Horne**: University of Edinburgh

## P4-25-2027 *Moral Foundations in Supreme Court Oral Arguments*

Presenting Author: **Dr Eyal Sagi**

**Eyal Sagi**: University of St. Francis

## P4-26-1308 *Evolution of moral semantics through metaphorization*

Presenting Author: **Aida Ramezani**

**Aida Ramezani**: University of Toronto; **Jennifer E Stellar**: University of Toronto; **Matthew Feinberg**: University of Toronto; **Yang Xu**: University of Toronto

## P4-27 *Vacant*

## P4-28-1447 *Leveraging psychometrics of rational inattention to estimate individual differences in the capacity for cognitive control*

Presenting Author: **Huang Ham**

**Huang Ham**: University of Pennsylvania; **Ivan Grahek**: Brown University; **Laura A. Bustamante**: Princeton University; **Nathaniel Daw**: Princeton University; **Andrew Caplin**: New York University; **Sebastian Musslick**: Brown University

## P4-29-2240 *Effects of negation and knowledgeability on pragmatic inferences*

Presenting Author: **Dr Alice Rees**

**Alice Rees**: University of Edinburgh; **Hannah Rohde**: University of Edinburgh

## P4-30-1937 *Modeling Social Influences on Indirectness in a Rational Speech Act Approach to Politeness*

Presenting Author: **Eleonore Lumer**

**Eleonore Lumer**: Bielefeld University; **Hendrik Buschmeier**: Bielefeld University

## POSTER SESSION 5 - LANGUAGE PROCESSING, REPRESENTATION, AND USE

JULY 29TH, 2022 – 10:20 – 12:00

## P5-1-1528 *Mouse-tracking meta-cognitive ratings of comprehension during garden-path sentences.*

Presenting Author: **Benjamin Nguyen**

**Benjamin Nguyen**: University of California, Merced; **Michael Spivey**: UC Merced

## P5-2-1345 *Islands effects without extraction: the discourse functions of constructions predicts island status*

Presenting Author: **Adele Goldberg**

**Nicole Cuneo**: Princeton University; **Adele Goldberg**: Princeton University

## P5-3-1757 *Satiation effects generalize across island types*

Presenting Author: **Jiayi Lu**

**Jiayi Lu**: Stanford University; **Nicholas Wright**: The College of William & Mary; **Judith Degen**: Stanford University

## P5-4-1538 *No agreement attraction facilitation observed in Czech: Not even syncretism helps*

Presenting Author: **Radim Lacina**

**Radim Lacina**: University of Potsdam; **Jan Chromý**: Faculty of Arts, Charles University

## P5-5-1536 *The Comprehension of Broad Focus: Probing Roothian Alternatives*

Presenting Author: **Radim Lacina**

**Radim Lacina**: University of Potsdam; **Sturt Patrick**: University of Edinburgh; **Nicole Gotzner**: University of Potsdam

## P5-6-1665 *Syntactic harmony arises from a domain-general learning bias*

Presenting Author: **Jennifer Culbertson**

**Jennifer Culbertson**: University of Edinburgh; **Simon Kirby**: The University of Edinburgh

## P5-7-1289 *Investigating the Presence of NegFirst Biases in Learning and Communication*

Presenting Author: **Danielle Burgess**

**Danielle Burgess**: University of Michigan

## P5-8 *Vacant*

## P5-9-1984 *LSTMs Can Learn Basic Wh- and Relative Clause Dependencies in Norwegian*

Presenting Author: **Anastasia Kobzeva**

**Anastasia Kobzeva**: Norwegian University of Science and Technology (NTNU); **Suhas Arehalli**: Johns Hopkins University; **Tal Linzen**: New York University; **Dave Kush**: University of Toronto



**P5-10-1667** *The interplay of situation-formality register congruence and verb-argument relations*

Presenting Author: **Ana-Maria Pleşca**

**Ana-Maria Pleşca**: Humboldt Universität zu Berlin; **Katja Maquate**: Humboldt-Universität zu Berlin; **Pia Knoeferle**: Humboldt University of Berlin; **Pia Knoeferle**: Einstein Center for Neurosciences Berlin

**P5-11-1103** *Word-final orthographic priming as a function of word frequency, prime duration, and morphological status*

Presenting Author: **Jeonghwa Cho**

**Jeonghwa Cho**: University of Michigan; **Jonathan R. Brennan**: University of Michigan

**P5-12-2345** *Overloaded Communication as Paternalistic Helping*

Presenting Author: **Stephanie Stacy**

**Stephanie Stacy**: University of California - Los Angeles; **Aishni Parab**: University of California, Los Angeles; **Max Kleiman-Weiner**: Massachusetts Institute of Technology; **Tao Gao**: UCLA

**P5-13-1390** *Moving past indirect proxies for language experience: 'Native speaker' and residential history are poor predictors of language behavior*

Presenting Author: **Lauretta S. P. Cheng**

**Lauretta S. P. Cheng**: University of Michigan; **Mathew A. Kramer**: University of Michigan; **Ria Upreti**: University of Texas at Austin; **Savithry Namboodiripad**: University of Michigan, Ann Arbor

**P5-14-1407** *Is the Language Familiarity Effect gradual? A computational modelling approach*

Presenting Author: **Maureen de Seyssel**

**Maureen de Seyssel**: ENS-PSL / EHESS / CNRS / INRIA; **Guillaume Wisniewski**: Université de Paris; **Emmanuel Dupoux**: EHESS, CNRS, ENS, INRIA

**P5-15-1849** *Predicting Fixation Locations in 43 Languages based on Perceptual Constraints and Information Theory*

Presenting Author: **Talia Kate Shafir**

**Talia Kate Shafir**: University of Toronto ; **Noam Siegelman**: Hebrew University of Jerusalem; **Ram Frost**: Hebrew University of Jerusalem; **Blair C. Armstrong**: University of Toronto

**P5-16-1549** *(How) Do Register and Morphosyntactic Congruence Effects Interact during Sentence Reading? Two Eye-Tracking Pilot Studies*

Presenting Author: **Valentina Nicole Pescuma**

**Valentina Nicole Pescuma**: Humboldt-Universität zu Berlin; **Camilo R. Ronderos**: University of Oslo; **Aine Ito**: National University of Singapore; **Katja Maquate**: Humboldt-Universität zu Berlin; **Pia Knoeferle**: Humboldt-Universität zu Berlin; **Pia Knoeferle**: Humb

**P5-17-1986** *Activation of biographical information via picture of cultural figures during comprehension: evidence from eye-tracking during reading*

Presenting Author: **Daniela Palleschi**

**Daniela Palleschi**: Humboldt-Universität zu Berlin; **Pia Knoeferle**: Humboldt-Universität zu Berlin

**P5-18-2047** *Effects of task and visual context on referring expressions using natural scenes*

Presenting Author: **Andreas Mädebach**

**Andreas Mädebach**: Universitat Pompeu Fabra; **Ekaterina Torubarova**: Universitat Pompeu Fabra; **Eleonora Gualdoni**: Universitat Pompeu Fabra; **Gemma Boleda**: Universitat Pompeu Fabra

**P5-19-1479** *Exploring context's role in the interpretation of novel noun compounds*

Presenting Author: **Barend Beekhuizen**

**Tiana V. Simovic**: University of Toronto; **Barend Beekhuizen**: University of Toronto, Mississauga

**P5-20-2058** *Learning cognitive and linguistic prosodic categories for automatic cross-lingual sign language understanding*

Presenting Author: **Mert Inan**

**Mert Inan**: University of Pittsburgh; **yang zhong**: University of Pittsburgh; **Sabit Hassan**: University of Pittsburgh; **Lorna C Quandt**: Gallaudet University; **Malihe Alikhani**: UPitt

**P5-21-1286** *Evidence for Availability Effects on Speaker Choice in the Russian Comparative Alternation*

Presenting Author: **Thomas Clark**

**Thomas Clark**: Massachusetts Institute of Technology; **Ethan Gottlieb Wilcox**: Harvard University; **Edward Gibson**: Massachusetts Institute of Technology; **Roger Levy**: Massachusetts Institute of Technology

**P5-22-1351** *Influence of Visual Information on Interpersonal Coordination of Head- and Body-Movement During Dyad Conversations*

Presenting Author: **Kentaro Kodama**

**Kentaro Kodama**: Tokyo Metropolitan University; **Daichi Shimizu**: Kobe University; **Ken Fujiwara**: National Chung Cheng University

**P4-23-1453** *Lightness constancy in reality, in virtual reality, and on flat-panel displays*

Presenting Author: **Khushbu Patel**

**Khushbu Patel**: York University; **Laurie M Wilcox**: York University; **Laurence T Maloney**: New York University; **Krista A. Ehinger**: The University of Melbourne; **Jaykishan Patel**: York University; **Emma Wiedenmann**: York University; **Richard Murray**: York University



**P5-24-1467** *Cross-cultural differences in the emergence of referential strategies in artificial sign languages*

Presenting Author: **Danielle Naegeli**

**Danielle Naegeli**: Tilburg University; **David Peeters**: Tilburg University; **Emiel Krahmer**: Tilburg University; **Marieke Schouwstra**: University of Amsterdam; **Yasamin Motamedi**: University of Edinburgh; **Connie De Vos**: Tilburg University

**P5-25-1347** *Communicating understanding of physical dynamics in natural language*

Presenting Author: **Haoliang Wang**

**Haoliang Wang**: University of California, San Diego; **Jane Yang**: University of California, San Diego; **Ronen Tamari**: Hebrew University of Jerusalem; **Judith E. Fan**: University of California, San Diego

**P5-26-1810** *The logic of guesses: how people communicate probabilistic information*

Presenting Author: **Tadeg Quillien**

**Tadeg Quillien**: University of Edinburgh; **Chris Lucas**: University of Edinburgh

**P5-27-1606** *Pragmatic comprehension of implicatures – consistency within individuals across types and time*

Presenting Author: **Margarita Ryzhova**

**Margarita Ryzhova**: Saarland University; **Jia Loy**: Saarland University; **Vera Demberg**: Saarland University

**P5-28-1982** *Backchannel Behavior in Child-Caregiver Zoom-Mediated Conversations*

Presenting Author: **Kübra Bodur**

**Kübra Bodur**: Aix-Marseille University; **Mitja Nikolaus**: Aix-Marseille University; **Abdellah Fourtassi**: Aix-Marseille University; **Laurent Prévot**: Aix-Marseille University

**P5-29-1619** *Do I need to repeat myself? Getting to the root of the Other Accent Effect*

Presenting Author: **Madeleine Yu**

**Madeleine Yu**: University of Toronto; **Jessamyn Schertz**: University of Toronto Mississauga; **Elizabeth Johnson**: University of Toronto

**P5-30-2213** *Where's the Bingleduff? How speaker accent shapes children's linguistic processing*

Presenting Author: **Miss Bailey Agard**

**Bailey Agard**: York University; **Thomas St. Pierre**: University of Toronto Mississauga; **Elizabeth Johnson**: University of Toronto

**P5-31-1104** *A conflict-based model of speech error repairs in humans*

Presenting Author: **Jack L Burgess**

**Jack L Burgess**: Carnegie Mellon University; **Nazbanou Nozari**: Carnegie Mellon University

**P5-32-1478** *Trees neural those: RNNs can learn the hierarchical structure of noun phrases*

Presenting Author: **Yevgen Matushevych**

**Yevgen Matushevych**: University of Edinburgh; **Jennifer Culbertson**: University of Edinburgh

**P5-33-1572** *Modeling Sentence Processing Effects in Bilingual Speakers: A Comparison of Neural Architectures*

Presenting Author: **Rasmus Roslund**

**Rasmus Roslund**: University of Edinburgh; **Yevgen Matushevych**: University of Edinburgh

**POSTER SESSION 6 - NEUROSCIENCE, AI, AND HUMAN-COMPUTER INTERACTION**

**JULY 30TH, 2022 – 8:30 – 10:10**

**P6-1-2130** *The Pure Poet: How Good is the Subjective Credibility and Stylistic Quality of Literary Short Texts Written with an Artificial Intelligence Tool as Compared to Texts Written by Human Authors?*

Presenting Author: **Vivian Emily Gunser**

**Vivian Emily Gunser**: Leibniz-Institut für Wissensmedien; **Steffen Gottschling**: Leibniz-Institut für Wissensmedien; **Birgit Brucker**: Knowledge Media Research Center; **Sandra Richter**: Deutsches Literaturarchiv Marbach; **Dilan Çakir**: Deutsches Literaturarchiv Ma

**P6-2-1180** *Linking Theories and Methods in Cognitive Sciences via Joint Embedding of the Scientific Literature: The Example of Cognitive Control*

Presenting Author: **Morteza Ansarinia**

**Morteza Ansarinia**: University of Luxembourg; **Paul Schrater**: University of Minnesota, Twin Cities; **Pedro Cardoso-Leite**: University of Luxembourg

**P6-3-2000** *Intertwining Generalization and Memorization*

Presenting Author: **Henry Coxe-Conklin**

**Henry Coxe-Conklin**: University of Edinburgh; **Kenny Smith**: University of Edinburgh

**P6-4-1773** *Deep networks as cognitive models: the case of reading in different orthographies*

Presenting Author: **Dr Juan C Valle-Lisboa**

**Camila Zugarramurdi**: Universidad de la Republica; **Soledad Assis**: Universidad de la República; **Juan C Valle-Lisboa**: Universidad de la República

**P6-5-2296** *Set Size Effects on the P3b in a BCI Speller*

Presenting Author: **Alessandro D'Amico**

**Alessandro D'Amico**: University of California, San Diego; **Virginia de Sa**: UC San Diego

## **P6-6-1081 *IPOWER: Incremental, Probabilistic, Open-World Reference Resolution***

Presenting Author: **Tom Williams**

**Will Culpepper**: Colorado School of Mines; **Thomas A Bennett**: Colorado School of Mines; **Lixiao Zhu**: Colorado School of Mines; **Rafael Sousa Silva**: Colorado School of Mines; **Ryan Blake Jackson**: Harvey Mudd College; **Tom Williams**: Colorado School of Mines

## **P6-7-1558 *Improving Systematic Generalization Through Modularity and Augmentation***

Presenting Author: **L.E. Ruis**

**L.E. Ruis**: University College London; **Brenden Lake**: NYU

## **P6-8-1421 *Biologically-Based Neural Representations Enable Fast Online Shallow Reinforcement Learning***

Presenting Author: **Dr Madeleine Bartlett**

**Madeleine Bartlett**: University of Waterloo; **Terrence C Stewart**: University of Waterloo Collaboration Centre; **Jeff Orchard**: University of Waterloo

## **P6-9-2156 *Efficient exploration of spatial environments through Map Induction using adaptable compositional map representations***

Presenting Author: **Sugandha Sharma**

**Sugandha Sharma**: MIT; **Aidan Curtis**: MIT; **Marta Kryven**: MIT; **Josh Tenenbaum**: MIT; **Ila Fiete**: MIT

## **P6-10-2182 *Simulating progressive neurodegeneration in silico with deep artificial neural networks***

Presenting Author: **Anup Tuladhar**

**Anup Tuladhar**: University of Calgary; **Jasmine Moore**: University of Calgary; **Zahinoor Ismail**: University of Calgary; **Nils Forkert**: University of Calgary

## **P6-11-1776 *Leveraging Intentional Factors and Task Context to Predict Linguistic Norm Adherence***

Presenting Author: **Tom Williams**

**Cailyn Smith**: Colorado School of Mines; **Charlotte Gorgemans**: University of Colorado Boulder; **Ruchen Wen**: Colorado School of Mines; **Saad Elbeleidy**: Colorado School of Mines; **Sayanti Roy**: Colorado School of Mines; **Tom Williams**: Colorado School of Mines

## **P6-12-1108 *A Property Induction Framework for Neural Language Models***

Presenting Author: **Kanishka Misra**

**Kanishka Misra**: Purdue University; **Julia Rayz**: Purdue University; **Allyson Ettinger**: University of Chicago

## **P6-13-1290 *Predicting Human Similarity Judgments Using Large Language Models***

Presenting Author: **Raja Marjeh**

**Raja Marjeh**: Princeton University; **Ilia Sucholutsky**: Princeton University; **Ted Sumers**: Princeton University; **Nori Jacoby**: Max Planck Institute for Empirical Aesthetics; **Tom Griffiths**: Princeton University

## **P6-14-1794 *Predicting Human Judgments of Relational Similarity: A Comparison of Computational Models Based on Vector Representations of Meaning***

Presenting Author: **Dr Bryor Sneffjella**

**Bryor Sneffjella**: UCLA; **Nicholas Ichien**: University of California, Los Angeles; **Keith Holyoak**: University of California, Los Angeles; **Hongjing Lu**: UCLA

## **P6-15-2175 *What sort of explanation should we expect from the algorithmic decision-making system?***

Presenting Author: **Hyundeuk Cheon**

**Hyundeuk Cheon**: Seoul National University

## **P6-16-2252 *Explanations that backfire: Explainable artificial intelligence can cause information overload***

Presenting Author: **Mrs Aidah Nakakande Ferguson**

**Aidah Nakakande Ferguson**: University College London; **Matija Franklin**: UCL; **David Lagnado**: University College London

## **P6-17-1257 *"Feels Like I've Known You Forever": Empathy and Self-Awareness in Human Open-Domain Dialogs***

Presenting Author: **Yoon Kyung Lee**

**Yoon Kyung Lee**: Seoul National University; **Won Ik Cho**: Seoul National University; **Seoyeon Bae**: Seoul National University; **Hyunwoo Choi**: Smilegate AI; **Jisang Park**: Seoul National University; **Nam Soo Kim**: Seoul National University; **Sowon Hahn**: Seoul National University

## **P6-18-1915 *Homophily and Incentive Effects in Use of Algorithms***

Presenting Author: **Sina Fazelpour**

**Riccardo Fogliato**: Carnegie Mellon University; **Sina Fazelpour**: Northeastern University; **Shantanu Gupta**: Carnegie Mellon University; **Zachary Lipton**: Carnegie Mellon University; **David Danks**: University of California, San Diego

## **P6-19-2157 *Modelling Competitive Human Action using Dynamical Motor Primitives for the Development of Human-Like Artificial Agents***

Presenting Author: **Miss Sarah Ekdawi**

**Sarah Ekdawi**: Macquarie University; **Gaurav Patil**: Macquarie University; **Rachel W. Kallen**: Macquarie University; **Michael J Richardson**: Macquarie University

**P6-20-1227** *The relation between gaze and turn-taking in dyadic avatar-mediated conversations*

Presenting Author: **Malin Spaniol**

**Malin Spaniol**: University Hospital Cologne; **Alicia Janz**: University of Cologne; **Mathis Jording**: Research Center Jülich; **Kai Vogetley**: University Hospital Cologne

**P6-21-1391** *Reward Prediction Error Neurons Implement an Efficient Code for Reward*

Presenting Author: **Dr. Heiko H Schuett**

**Dongjae Kim**: New York University; **Heiko H Schuett**: New York University; **Wei Ji Ma**: New York University

**P6-22-1237** *Hippocampus Engagement Early in Learning Supports Concept Formation*

Presenting Author: **Melisa Gumus**

**Melisa Gumus**: University of Toronto; **Michael L. Mack**: University of Toronto

**P6-23-1301** *Using fMRI to study the neural basis of violation-of-expectation*

Presenting Author: **Shari Liu**

**Shari Liu**: MIT; **Kirsten Lydic**: MIT; **Sabrina Hsiao-Ling Piccolo**: MIT; **Rebecca Saxe**: MIT

**P6-24-1500** *The role of primary motor cortex in inhibition of return: An investigation using transcranial magnetic stimulation*

Presenting Author: **Dr Judith Bek**

**Judith Bek**: University of Toronto; **Merryn D Constable**: Northumbria University; **Matthew Hilchey**: University of Toronto; **Timothy Welsh**: University of Toronto

**P6-25-2011** *A Model for Optic Flow Integration in Locust Central-Complex Neurons Tuned to Head Direction*

Presenting Author: **Kathrin Pabst**

**Kathrin Pabst**: Philipps-Universität; **Frederick Zittrell**: Marburg University; **Uwe Homberg**: Philipps Universität Marburg; **Dominik M Endres**: Philipps-Universität

**P6-26-2090** *Individual-specific versus shared cognitive states differently support complex semantic and perceptual judgments*

Presenting Author: **Sagana Vijayarajah**

**Sagana Vijayarajah**: University of Toronto; **Margaret L Schlichting**: University of Toronto

**P6-27-1533** *The P600 and P3 ERP components are linked to pupil dilation as correlate of norepinephrine activity*

Presenting Author: **Friederike Contier**

**Friederike Contier**: University of Potsdam; **Mathias Weymar**: University of Potsdam; **Isabell Wartenburger**: University of Potsdam; **Milena Rabovsky**: University of Potsdam

**P6-28-1996** *A neurophysiological investigation of noisy channel sentences*

Presenting Author: **Prof Veena Dhar Dwivedi**

**Veena Dhar Dwivedi**: Brock University; **Pratik Nath**: Brock University

**P6-29-2299** *A dynamic neural field model of phonetic trace effects in speech errors*

Presenting Author: **Michael C. Stern**

**Michael C. Stern**: Yale University; **Manasvi Chaturvedi**: Yale University; **Jason A. Shaw**: Yale University

**P6-30-1987** *Validating child-friendly neuroimaging language localizer in adults*

Presenting Author: **Halie Olson**

**Halie Olson**: MIT; **Emily Chen**: MIT; **Hana Ro**: MIT; **Somaia Saba**: MIT; **Kirsten Lydic**: MIT; **Rebecca Saxe**: MIT

**P6-31** *Vacant*

**P6-32-1814** *Modeling the regular/irregular dissociation in non-fluent aphasia in a recurrent neural network*

Presenting Author: **Alexandra Krauska**

**Alexandra Krauska**: University of Maryland; **Naomi H Feldman**: University of Maryland

**POSTER SESSION 7 - CONCEPTS, SEMANTIC REPRESENTATION, AND MEMORY**

**JULY 30TH, 2022 – 13:00 – 14:40**

**P7-1-2073** *Semantically homogenous item displays improve memory for item recall but not item location*

Presenting Author: **Xinyi Lu**

**Xinyi Lu**: University of Waterloo; **Mona Zhu**: University of Waterloo; **Evan Risko**: University of Waterloo

**P7-2-1451** *Examining Prioritization in Working Memory for Verbal and Visual Stimuli*

Presenting Author: **Emily Williamson**

**Emily Williamson**: Mississippi State University; **Jarrod Moss**: Mississippi State University

**P7-3-1488** *Investigating the Effect of Synthetic Voice Naturalness on Gist Memory*

Presenting Author: **Ashley R Keaton**

**Ashley R Keaton**: University of California, Davis; **Georgia Zellou**: University of California, Davis

**P7-4-1678** *Forgetting in delayed recognition as generative compression with decreasing capacity*

Presenting Author: **David G. Nagy**

**Csenge Frater**: Wigner Research Centre for Physics; **David G. Nagy**: HAS Wigner Research Centre for Physics; **Gergő Orbán**: MTA Wigner RCP

### **P7-5-1751** *Using “Semantic Scent” to Predict Item-Specific Clustering and Switching Patterns in Memory Search*

Presenting Author: **Larry Zhang**

**Larry Zhang**: Indiana University Bloomington; **Michael N. Jones**: Indiana University

### **P7-6-1328** *Bayesian rational memory model simulates temporal binding effect*

Presenting Author: **Laura Saad**

**Laura Saad**: Rutgers University; **Julien Musolino**: Rutgers University; **Pernille Hemmer**: Rutgers University

### **P7-7-1945** *Thinking Faster and Slower: A Resource-Rational Model of Working Memory Encoding*

Presenting Author: **Msc. Joost de Jong**

**Joost de Jong**: University of Groningen; **Hedderik van Rijn**: University of Groningen; **Elkan Akyürek**: University of Groningen

### **P7-8-1452** *Working Memory Capacity Predicts More Effective Problem Space Exploration*

Presenting Author: **Xinyu Xie**

**Xinyu Xie**: Mississippi State University; **Jarrod Moss**: Mississippi State University

### **P7-9-2119** *Forward and Backward Serial Recall*

Presenting Author: **Matthew Dougherty**

**Matthew Dougherty**: University of Pennsylvania; **Michael Kahana**: University of Pennsylvania; **David J. Halpern**: University of Pennsylvania

### **P7-10-1300** *Semantic Working Memory Predicts Relative Clause Sentence Comprehension: A Case Series Approach*

Presenting Author: **Rachel Zahn**

**Rachel Zahn**: Rice University; **Autumn Horne**: Rice University; **Oscar Najera**: University of Texas at Austin; **Randi Martin**: Rice University

### **P7-11-2312** *Constructing Individualized Computational Models for Dementia Patients*

Presenting Author: **Peggy Fidelman**

**Peggy Fidelman**: The University of Texas at Austin; **Uli Grasemann**: The University of Texas at Austin; **Claudia Peñaloza**: University of Barcelona; **Michael Scimeca**: Boston University; **Yakeel T. Quiroz**: Massachusetts General Hospital; **Swathi Kiran**: Boston Univ

### **P7-12-1364** *Memory without Imagery: No Evidence of Visual Working Memory Impairment in People with Aphantasia*

Presenting Author: **Kathryn F. Knight**

**Kathryn F. Knight**: University of Exeter; **Fraser Milton**: University of Exeter; **Adam Zbynek James zeman**: University of Exeter Medical School

### **P7-13-1252** *Compositional Generalization in a Graph-based Model of Distributional Semantics*

Presenting Author: **Shufan Mao**

**Shufan Mao**: University of Illinois at Urbana Champaign; **Philip A Huebner**: University of Illinois, Urbana-Champaign; **Jon Willits**: University of Illinois at Urbana-Champaign

### **P7-14-1491** *Robustness of graph theoretic representations of semantic networks*

Presenting Author: **Isabella Destefano**

**Maria Robinson**: University of California San Diego; **Isabella Destefano**: University of California, San Diego; **Timothy F. Brady**: University of California, San Diego; **Ed Vul**: University of California, San Diego

### **P7-15-2267** *Representations of emotion concepts: Comparison across pairwise, appraisal feature-based, and word embedding-based similarity spaces*

Presenting Author: **Jonathan Phillips**

**Mijin Kwon**: Dartmouth College; **Tor Wager**: Dartmouth College; **Jonathan Phillips**: Dartmouth College

### **P7-16-1190** *Talker identification as a categorization problem*

Presenting Author: **Casey L Roark**

**Casey L Roark**: University of Pittsburgh; **Gangyi Feng**: The Chinese University of Hong Kong; **Bharath Chandrasekaran**: University of Pittsburgh

### **P7-17-2316** *Language-induced categorical perception of faces?*

Presenting Author: **Ana Chkhaidze**

**Ana Chkhaidze**: UC San Diego; **Lars Strother**: University of Nevada, Reno

### **P7-18** *Vacant*

### **P7-19-2343** *The paradox of learning categories from rare examples: a case study of NFTs & The Bored Ape Yacht Club*

Presenting Author: **Jordan W. Suchow**

**Jordan W. Suchow**: Stevens Institute of Technology; **Vahid Ashrafimoghari**: Stevens Institute of Technology

### **P7-20-2176** *Overlapping semantic representations of sign and speech in novice sign language learners*

Presenting Author: **Megan E. Hillis**

**Megan E. Hillis**: Dartmouth College; **Brianna Aubrey**: Dartmouth College; **Julien Blanchet**: Dartmouth College; **Qijia Shao**: Dartmouth College; **Xia Zhou**: Dartmouth College; **Devin Balkcom**: Dartmouth College; **David J. M. Kraemer**: Dartmouth College



**P7-21-1642** *Lexical Categorization Variables for English and Mandarin Quantify Ambiguity in Object Naming*

Presenting Author: **Gabrielle Ma**

**Gabrielle Ma**: Swarthmore College ; **Benjamin D. Zinszer**: Swarthmore College

**P7-22-1189** *Coding Strategies in Memory for 3D Objects: The Influence of Task Uncertainty*

Presenting Author: **Christopher Bates**

**Christopher Bates**: Harvard University; **Samuel Gershman**: Harvard University

**P7-23** *Vacant*

**P7-24-2266** *What comes to mind? Samples from relevance-based feature spaces*

Presenting Author: **Jonathan Phillips**

**Tracey Mills**: Dartmouth College; **Jonathan Phillips**: Dartmouth College

**P7-25-1763** *Testing the testing effect with featural and relational categories*

Presenting Author: **Enoch Sumakpoyaa**

**Enoch Sumakpoyaa**: Syracuse University; **Daniel Corral**: Syracuse University

**P7-26-2209** *Generalization and Transfer Learning in Neural Networks Performing Shape, Size, and Color Classification*

Presenting Author: **Dr. Jon Willits**

**Aishi Huang**: University of Illinois Urbana Champaign; **Philip A Huebner**: University of Illinois, Urbana-Champaign; **Jon Willits**: University of Illinois at Urbana-Champaign

**P7-27-1239** *Verbal Labels Affect Holistic and Analytic Thinking Styles in Native English Speakers*

Presenting Author: **Dr. Lang Chen**

**Meg Richter**: Santa Clara University; **Birgit Koopmann-Holm**: Santa Clara University; **Lang Chen**: Santa Clara University

**P7-28-1401** *Culture and Category Learning: The Relationship between Analytic and Holistic Thinking Styles*

Presenting Author: **Ms Neha Khemani**

**Neha Khemani**: Western University; **Ana C Ruiz Pardo**: Western University; **John Paul Minda**: The University of Western Ontario

**P7-29-1296** *Category learning across the menstrual cycle: Learning exceptions to the rule varies by hormonal milieu*

Presenting Author: **Mateja Perovic**

**Mateja Perovic**: University of Toronto; **Emily M. Heffernan**: University of Toronto ; **Gillian Einstein**: University of Toronto; **Michael L. Mack**: University of Toronto

**P7-30-2054** *An In Silico Exploration of the Effect of Surprising Information on Hippocampal Representations*

Presenting Author: **Emily M. Heffernan**

**Emily M. Heffernan**: University of Toronto ; **Michael L. Mack**: University of Toronto

**P7-31-1169** *The emergence of discrete and systematic communication in a continuous signal-meaning space*

Presenting Author: **Alicia M Chen**

**Alicia M Chen**: Harvard University; **Matthias Hofer**: MIT; **Moshe Poliak**: Harvard University; **Roger Levy**: Massachusetts Institute of Technology; **Noga Zaslavsky**: MIT

**P7-32-1772** *Identifying concept libraries from language about object structure*

Presenting Author: **Catherine Wong**

**Catherine Wong**: Massachusetts Institute of Technology; **William P McCarthy**: University of California, San Diego; **Gabriel Grand**: MIT; **Yoni Friedman**: MIT; **Josh Tenenbaum**: MIT; **Jacob Andreas**: Massachusetts Institute of Technology; **Robert Hawkins**: Princeton Un

**POSTER SESSION 8 - REASONING, LEARNING, AND REPRESENTATION**

**JULY 30TH, 2022 – 15:00 – 16:40**

**P8-1-1229** *A Perceptually Grounded Neural Dynamic Architecture Establishes Analogy Between Visual Object Pairs*

Presenting Author: **M.Sc. Matthis E Hesse**

**Matthis E Hesse**: Fakultät für Philosophie und Erziehungswissenschaft; **Daniel Sabinasz**: Institut für Neuroinformatik; **Gregor Schöner**: Ruhr-Universität Bochum

**P8-2-1517** *Impact of Semantic Representations on Analogical Mapping with Transitive Relations*

Presenting Author: **Bryce Linford**

**Bryce Linford**: UCLA; **Nicholas Ichien**: University of California, Los Angeles; **Keith Holyoak**: University of California, Los Angeles; **Hongjing Lu**: UCLA



### P8-3-1893 *Maximum Entropy Function Learning*

Presenting Author: **Simon Segert**

**Simon Segert**: Princeton University; **Jonathan Cohen**: Princeton University

### P8-4-1322 *Transfer of Learning-Guided Cognitive Control through Congruency Cues: a study involving two variants of Flanker task*

Presenting Author: **Nicola Vasta**

**Nicola Vasta**: University of Trento; **Barbara Treccani**: University of Trento; **Claudio Mulatti**: Università di Trento

### P8-5-2199 *Catastrophic interference in neural network models is mitigated when the training data reflect a power-law environmental structure*

Presenting Author: **Sibley Lyndgaard**

**Sibley Lyndgaard**: Georgia Institute of Technology; **Zachary R Tidler**: Georgia Institute of Technology; **Lucas Provine**: Georgia Institute of Technology; **Sashank Varma**: Georgia Tech

### P8-6-1339 *Integration of Event Experiences to Build Relational Memory in the Human Brain*

Presenting Author: **Dr Anna Leshinskaya**

**Anna Leshinskaya**: UC Davis; **Mitchell A Nguyen**: University of California, Davis; **Charan Ranganath**: University of California, Davis

### P8-7-1594 *Pre-boundary lengthening and pause signal boundaries in action sequences*

Presenting Author: **Matt Hilton**

**Matt Hilton**: University of Potsdam; **Isabell Wartenburger**: University of Potsdam; **Julius Verrel**: University of Lübeck; **Birgit Elsner**: University of Potsdam

### P8-8-1696 *Event Segmentation In Story Listening Using Deep Language Models*

Presenting Author: **Dr. Manoj Kumar**

**Manoj Kumar**: Princeton University; **Ariel Goldstein**: Princeton University; **Sebastian Michelmann**: Princeton University; **Jeffrey M. Zacks**: Washington University in Saint Louis; **Kenneth Norman**: Princeton University; **Uri Hasson**: Princeton University

### P8-9-2271 *Name that state: How language affects human reinforcement learning*

Presenting Author: **Angela Radulescu**

**Angela Radulescu**: New York University; **Wai Keen Vong**: New York University; **Todd M Gureckis**: New York University

### P8-10-1631 *A computer mouse-based throwing task to study perceptual-motor skill learning in humans and machines*

Presenting Author: **Dr. Patrick Nalepka**

**Patrick Nalepka**: Macquarie University; **Georgina Schell**: Macquarie University; **Gaurav Patil**: Macquarie University; **Michael J Richardson**: Macquarie University

### P8-11-2232 *Inferring object interactions from scraping and rolling sounds*

Presenting Author: **Vinayak Agarwal**

**Vinayak Agarwal**: MIT; **Josh McDermott**: Massachusetts Institute of Technology

### P8-12-1263 *Exploiting Embodied Simulation to Detect Novel Object Classes Through Interaction*

Presenting Author: **Nikhil Krishnaswamy**

**Nikhil Krishnaswamy**: Colorado State University; **Sadaf Ghaffari**: Colorado State University

### P8-13-1067 *Pupil Diameter as Implicit Measure to Estimate Sense of Embodiment*

Presenting Author: **Sara Falcone**

**Sara Falcone**: University of Twente; **Liang Zhang**: University of Twente; **Saket Sachin Pradhan**: University of Twente; **Ivo V. Stuldreher**: TNO; **Ioana Cocu**: TNO; **Martijn Heuvel**: TNO; **Pieter Simke de Vries**: TNO; **Kaj Gijsbertse**: TNO; **Gwenn Englebienne**: University

### P8-14-2351 *Looking into the past: Eye-tracking mental simulation in physical inference*

Presenting Author: **Ari Beller**

**Ari Beller**: Stanford University; **Yingchen Xu**: Stanford University; **Tobias Gerstenberg**: Stanford University

### P8-15-2188 *The role of body representations in higher order cognition*

Presenting Author: **Miss Suesan G MacRae**

**Suesan G MacRae**: University of Northern British Columbia; **Heath Matheson**: University of Northern British Columbia

### P8-16-2280 *Comparisons in Adaptive Perceptual Category Learning*

Presenting Author: **Victoria L Jacoby**

**Victoria L Jacoby**: University of California, Los Angeles; **Christine M. Massey**: University of California, Los Angeles; **Everett Mettler**: University of California, Los Angeles; **Philip J Kellman**: University of California, Los Angeles

### P8-17-1927 *Bayesian gates: a probabilistic modeling tool for temporal segmentation of sensory streams into sequences of perceptual accumulators*

Presenting Author: **Julien Diard**

**Mamady Nabé**: Université Grenoble Alpes; **Jean-Luc Schwartz**: CNRS; **Julien Diard**: CNRS - Université Grenoble Alpes

### P8-18-1847 *Dimension-Based Statistical Learning in Older Adults*

Presenting Author: **Alana Hodson**

**Alana Hodson**: Carnegie Mellon University; **Mishaela DiNino**: Carnegie Mellon University; **Barbara Shinn-Cunningham**: Carnegie Mellon University; **Lori L Holt**: Carnegie Mellon University

**P8-19-1556** *The Treachery of Images: Objects, Pictures, Words and the Role of Affordances in Similarity Judgements*

Presenting Author: **Robyn Erica Wilford**

**Robyn Erica Wilford**: Western University; **Vicente Raja**: Western University; **Meghan Hershey**: Franklin & Marshall College ; **Michael Anderson**: University of Western Ontario

**P8-20-1754** *Combining mental simulation and abstract reasoning explains people's reaction time in an intuitive physics task*

Presenting Author: **Felix Anthony Sosa**

**Felix Anthony Sosa**: Harvard University; **Samuel Gershman**: Harvard University; **Tomer Ullman**: Harvard University

**P8-21-2056** *Eliciting Human Beliefs using Random Generation*

Presenting Author: **Pablo Leon Villagra**

**Pablo Leon Villagra**: Brown University; **Lucas Castillo**: University of Warwick; **Nick Chater**: University of Warwick; **Adam Sanborn**: University of Warwick

**P8-22-1102** *Imprecise Probabilistic Inference from Sequential Data*

Presenting Author: **Dr Arthur Prat-Carrabin**

**Arthur Prat-Carrabin**: Columbia University; **Michael Woodford**: Columbia University

**P8-23-2120** *Bridging cultural and cognitive perspectives on similarity reasoning*

Presenting Author: **Alexandra Carstensen**

**Alexandra Carstensen**: UC San Diego; **Chiara Saponaro**: University of Milano-Bicocca; **Michael C. Frank**: Stanford University; **Caren M. Walker**: University of California San Diego

**P8-24-2129** *Framing biodiversity Conceptions*

Presenting Author: **Laura Leon Perez**

**Laura Leon Perez**: Geneva University; **Catherine Audrin**: University of Teacher Education Lausanne; **Emmanuel Sander**: University of Geneva

**P8-25-1819** *Addressing homelessness in LA County by combat or cure: Examining the effect of conceptual metaphor on reasoning*

Presenting Author: **Shervin Nosrati**

**Shervin Nosrati**: California State University Northridge; **Tara Nicole Lee**: California State University, Northridge; **Nicole Abboud**: California State University Northridge

**P8-26-2160** *The Effects of Reflective Reasoning on Philosophical Dilemmas*

Presenting Author: **Daniel Corral**

**William T. Ervin**: Syracuse University; **Daniel Corral**: Syracuse University

**P8-27-1634** *The Compelling Complexity of Conspiracy Theories*

Presenting Author: **Jessecae K. Marsh**

**Jessecae K. Marsh**: Lehigh University; **Cayse Coachys**: Lehigh University; **Samantha Kleinberg**: Stevens Institute of Technology

**P8-28-1804** *Loaded Language and Conspiracy Theorizing*

Presenting Author: **Emily Klein**

**Emily Klein**: RPI; **James Hendler**: RPI

**P8-29-1593** *All Animals are Conscious: A New Premise in the Cognitive Science of Consciousness*

Presenting Author: **Kristin Andrews**

**Kristin Andrews**: York University

**P8-30-1477** *Modelling Forgetting at Different Timescales*

Presenting Author: **Maarten van der Velde**

**Maarten van der Velde**: University of Groningen; **Florian Sense**: University of Groningen; **Jelmer Borst**: University of Groningen; **Hedderik van Rijn**: University of Groningen

**P8-31-1420** *Modeling the Learning and Use of Probability Distributions in Chimpanzees and Humans*

Presenting Author: **Dr. Ardavan Nobandegani**

**Thomas Shultz**: McGill University; **Ardavan S. Nobandegani**: McGill University



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