

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

27 – 30 July 2022 Toronto, Ontario, Canada

Program for the 44th Annual Meeting of the Cognitive Science Society



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Rumethart Reception at Deta. Hotel SO-HO Ballroom (1800 - 19.00)	Transitional Break to welk over to the Celta	In Room 102 - John W.H. Basself Theatre	Michael Tomasello (16:10 - 17:40)	100	ical Al materie i diversi mitton concep on ecisions atton	20 minute coffee break (14:00 - 14:20)	Control of	Lunch on Own Session (12:00-13:00)	Symposium 3: Diversity in spatial cognition Symposium 4: SPARK, Race, culture, and language Emption Human-computer interaction Computational neuroscience 1 Culture and cognition Social cog 2: Attention Phonology Memory 1 Cognition of time 1: Perception 1 Language soq 2: Language soq 1 Poster Session 5: Language processing, representation, and use		invited Symposium: Global Challenges for CogSCI Causation 1 Reasoning Education Language modeling Language acquisition 2 Al 1 Learning 1 Enhodied cog Evert cog 3 Reading 1 Multilegualism 2 Poster Session 4: Social cognition morality, and groups		102 - 103 164A 194B 164C 164D 161 282D 202B 201 261 Constitution
		Closing / Thank you to Room John W.H. Bassett Theatre	Transitional Break	Glushko Talks Symposium 8: Bilingual sentence processing Networks and groups Language acquisition 3: Memory Causation 2 Culture Pregnatics Social cog 3 Emotion 3: HCI 2 Learning 3: Cognition of time 2: Music and art Poster Session 8: Reasoning, learning, and representation	20 minute coffee break (14.40 - 15.00)	Invited Syr and Sc. Computati Embly Syntax Coordinate Decision mile Analogy Poster St	7.6	Lunch on Own (1200-1300)	Keynote: Neil Lewis (10.25-11.25) Whose minds matter? Theoretical and practical implications of representation in the Cognitive Sciences In Room 102 - John W.H. Basselt Theatre C55 behind the scenes: Updates from the Society Chair, Kenny Smith In Room 102 - John W.H. Bassett Theatre	10 - 10:25)	Rumelhart Symposium Symposium 7: Diversity in event cognition and language Groups and cooperation Development 2 Semantics Syntax and morphology Sociolinguistics 2 Language act 3 action making 2 Communication 2 Perception 2 Education 2 Education 2 Losser Bession 6: Neuroscience, Al, and human-computer interaction		192- 193 194A 194B 194C 194D 292D 292B 291 291 Constitution

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DEAR COLLEAGUES

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

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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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

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

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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

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.

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.



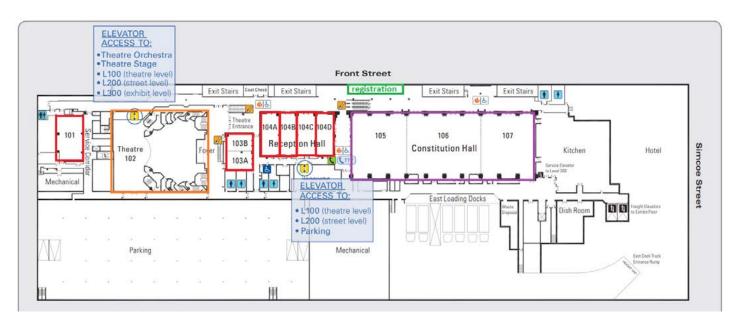




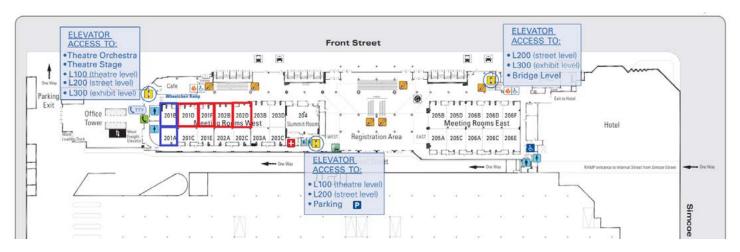
COAT CHECK

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 Pumpernickels • Tim Horton's • Subway • Tabouli Umi Sushi

Metro Hall Food Court 200 Wellington St W

One block north of Front St.

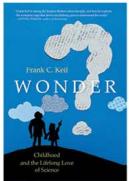
Booster Juice · Brioche Dorée · California Thai · Harvest Green · Jimmy the Greek Koha Kitchen • Kupfert and Kim • Manchu Wok • Soup Nutsy • Starbucks • Subway Sushi Shop • Tim Horton's

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



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 Stav 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.

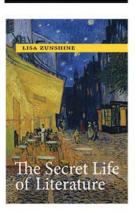
9780262046701|\$50.00

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





CogSci 2022

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/

e-scholarship

The proceedings for past years' conferences are available at: 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.

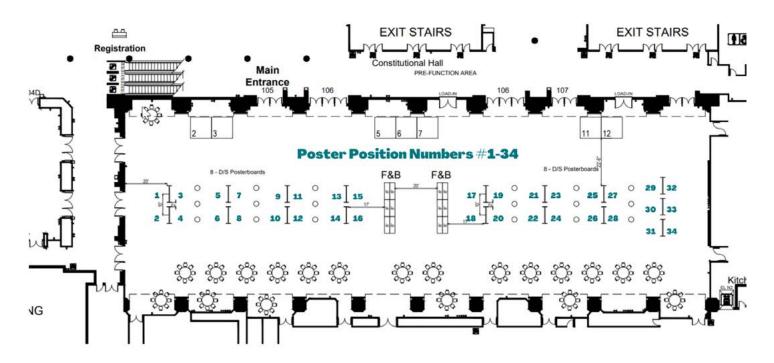
Poster presentations:

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 boardPresenters 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

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

Duolingo (www.duolingo.com) is the most popular language-learning platform and the most downloaded education app worldwide. The company's mission is to develop the best education in the world and make it universally available. The app makes learning new languages fun and motivating with bite-sized lessons that feel like playing a game. The effectiveness of the app is monitored through analyzing in-app data, as well as research studies that use independent assessments (www.duolingo.com/efficacy). Duolingo offers over 100 total courses across 40 distinct languages, from Spanish, French, German and Japanese to Navajo and Yiddish.

@duolingo (Twitter, Facebook, Instagram)

FIVE

FINDINGFIVE CORPORATION Booth #6

FindingFive is a non-profit tech startup with a mission of building the technological infrastructure for online behavioral research. We focus on eliminating the pain points faced by researchers such as programming an online study and securely collecting and storing participant data. Our web platform, www.findingfive.com, enables researcher to rapidly create browser-based online studies with academic terms that are already familiar to them. FindingFive now also has its own participant pool so that researchers can create studies and recruit participants all in the same place.

@findingfive (facebook), @UpdateFF (twitter), www.findingfive.com

EXHIBITOR



MIT PRESS Booth #7

Established in 1962, the MIT Press is one of the largest and most distinguished university presses in the world and a leading publisher of books and journals at the intersection of science, technology, art, social science, and design.

www.mitpress.mit.edu



THE UNIVERSITY OF CHICAGO PRESS, JOURNAL DIVISION

Founded in 1890, the University of Chicago Press is one of the oldest continuously operating university presses in the United States. Through our books and more than 90 journals, we seek not only to advance scholarly conversation within and across traditional disciplines but, in keeping with the University of Chicago's experimental tradition, to help define new areas of knowledge and intellectual endeavor.

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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, FFDvs: **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., Professor in the Center for Neural Science and Department of Psychology at New York University

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 Avcı, 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

2022 SYMPOSIA WINNER

Dr. Sydney Levine, Massacheusetts 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 Adolfi, 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

Deep Learning for Brain Encoding and Decoding

Room 103, North Building

Organizers and Presenters: Subba Reddy Oota, IIIT Hyderabad; Jashn Arora, IIIT Hyderabad; Manish Gupta, IIIT Hyderabad; Raju Bapi, IIIT Hyderabad; Mariya Toneva, Carneaie 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 Building Trust and Conducting Research With Minoritized **Communities: A Spark-Sponsored Tutorial**

Room 104A. North Building

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

Room 104D. North Buildina

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

> 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.



CogSci 2022

08:30 - 9:00 JULY 28TH, 2022

Room 102 John W. H. Bassett Theatre

WELCOME FROM CSS CHAIR & ORGANIZERS

Room 102. John W. H. Bassett Theatre Melbourne

09:00 – 10:00 The Psychology of Cultural Dynamics

Yoshihisa Kashima, Melbourne School of Psychological Sciences, The University of



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 Room 105-107 **Constitution Hall**

COFFEE BREAK

Virtual

10:00 - 11:15 **AFFINITY GROUP**

(Virtual) Diverse Careers In Cognitive Science

Room 102, Iohn W. H.

10:20 – 12:00 INVITED SYMPOSIUM - COGNITION ACROSS DIVERSE POPULATIONS

Children's everyday language experiences across urban and rural Bassett Theatre contexts

Marisa Casillas, University of Chicago

Human Diversity = Human Elasticity: Natural Languages of Speech and Sian

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 - EVENT COGNITION 1

Room 202B

10:20 - 11:05 FT3 - LANGUAGE PROCESSING 1

Room 201D

10:20 - 11:05 FT4 - NUMERICAL COGNITION 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

John W.H. Basset 2022 WINNER: Franck Ramus, Paris Sciences et Lettres University

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

Centre 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 202D

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

Room 202B

13:00 - 13:45 FT11 - EDUCATION 1

Room 201D

13:00 - 13:45 FT12 - COMMUNICATION 1

Room 201F

13:50 - 14:35 FT13 - SPATIAL COGNITION

Room 202D

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

Room 202D

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

Room 201D

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]

Room 102 John W. H.

15:00 - 16:40 Distorted constellations: interdisciplinary perspectives on

understanding reality and the self

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

Room 103 Interaction North Building

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 Virtual, Monday, July 25, 09:00 – 10:00 *OR* Onsite, Thursday, July 28, 17:00 – 18:00 Room 103 Virtual Neurodiversity discussion group Thursday, July 28, 16:40 - 18:15 8:30 - 10:10 JULY 29TH, 2022 Room 102 **INVITED SYMPOSIUM - GLOBAL CHALLENGES FOR COGNITIVE** John W.H. Bassett Theatre **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

VIRTUAL FLASH TALK SESSIONS

8:30 - 9:15 FT25 - THEORY OF MIND 2 Room 202D

8:30 - 9:15 FT26 - LEARNING 1

Room 202B

Room 104D

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, Room 102 and Ability 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**

Room 101

12:00 – 13:00 DUOLINGO SPONSOR SESSION

Learning Science Jobs at Duolingo

Bozena Pajak, VP of Learning and Curriculum

First 100ppl receive boxed lunch

13:00 - 14:00 Room 102 John W. H. Bassett Theatre

Resisting demhumanization in the age of AI

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 Room 105-107 **Constitution Hall**

COFFEE BREAK

SYMPOSIUM 5 [details]

Room 102 John W. H.

14:20 – 16:00 Competing perspectives on building ethical AI: psychological, philosophical, and computational approaches

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]

Room 103 North Building

14:20 - 16:00 Innateness, Universals, Diversity

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. Michae

Michael Tomasello, Department of Psychology and Neuroscience, Duke University & Max

Bassett Theatre Planck Institute for Evolutionary Anthropology

RUMELHART RECEPTION

champagne toast!

18:00 – 19:00 Celebrate the 23rd Rumelhart Winner Announcement with a SOHO Ballroom, champagne toest!

Delta Hotel,

75 Lower Simcoe

Street Toronto, Ontario 08:30 - 10:10 JULY 30TH, 2022

Room 102

RUMELHART SYMPOSIUM John W. H.

Bassett Theatre Chair: Jan Engelmann, University of California Berkeley

Speakers:

Marjorie Rhodes, New York University

Tamar Kushnir, Duke University **Hyo Gweon**, Stanford University

SYMPOSIUM 7 [details]

08:30 – 10:10 Universality and Diversity in Event Cognition and Language

Room 103 North Building

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 T29 - GROUPS AND COOPERATION

Room 104A

08:30 - 10:10 T30 - DEVELOPMENT 2

Room 104B

08:30 - 10:10 T31 - SEMANTICS

Room 104C

08:30 - 10:10 T32 - SYNTAX AND MORPHOLOGY

Room 104D

VIRTUAL FLASH TALK SESSIONS

08:30 - 09:15 FT49 - LANGUAGE ACQUISITION 3

Room 202D

08:30 - 09:15 FT50 - COMMUNICATION 2

Room 202B

08:30 - 09:15 FT51 - EMOTION 2

Room 201D

08:30 - 09:15 FT52 - CAUSATION AND EXPLANATION 2

Room 201F

09:20 - 10:05 FT53 - SOCIOLINGUISTICS 2

Room 202D

09:20 - 10:05 FT54 - DECISION MAKING 2

Room 202B

09:20 - 10:05 FT55 - PERCEPTION 2

Room 201D

09:20 - 10:05 FT56 - EDUCATION 2

Room 201F

POSTER SESSION 6

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

Room 105-107 Constitution Hall

10:10 - 10:25 Room 105-107 **Constitution Hall**

COFFEE BREAK

Room 102 John W. H.

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

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

Room 102, John W.H. Bassett Theatre

13:00 - 14:40 Having the "right" emotions: The role of emotional acculturation in minority belonging

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

13:00 - 13:45 FT61 - DECISION MAKING 3

Room 202B

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

Kelsey Allen, MIT John W.H.

Bassett Theatre 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

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 202D

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**



Room 102 John W. H. Bassett Theatre



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THE UNIVERSITY OF CHICAGO PRESS JOURNALS

INVITED SYMPOSIUM – COGNITION ACROSS DIVERSE POPULATIONS

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 guintessential 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-tospecific 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

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. For summary tweet thread see: 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

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 (Puledda 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: 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

THURSDAY, 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

THURSDAY, 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 Skorburg, 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

THURSDAY, 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

THURSDAY, 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

THURSDAY, JULY 30TH

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

Speakers: Xavier Hinaut, Bordeaux 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 ofbilingual sentence production), Lin Chen (research associate with an expertise in reading processes), and a joint talk by Irene Winther and Yevgen Matusevych (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).

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 Univeristy

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.

Doumas: 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 Decisionmaking: 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 Systemwide 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 Nov

Maor Rosenberg: Tel-Aviv University; Goren Gordon: Tel Aviv University; Lior Noy: Ono Academic College (OAC); Kristian Tylen: 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: Unversity of Pennsylvania

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

Presenting Author: Irene Zhou

Irene Zhou: Massachusetts Institute of Technology: Iennifer 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 Bascandziev

Igor Bascandziev: 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 Barense**: 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 McDougle**: 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

institute of recrinology

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 Tseltal 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. WooJin Chung

WooJin 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 Univeristy; 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 Univeristy

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 Pennsylvan

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 Univ

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 **lastrzem**

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, quided 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. Tartaglini

Alexa R. Tartaglini: 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

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 - Universitaetsmedizin Berlin; Tankred Saanum: Max Planck Institute for Biological Cybernetics; Marcel

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 Devne**: 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**

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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 Kuperwais: 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: Beliefdriven 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 eyetracking

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; Jessecae 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

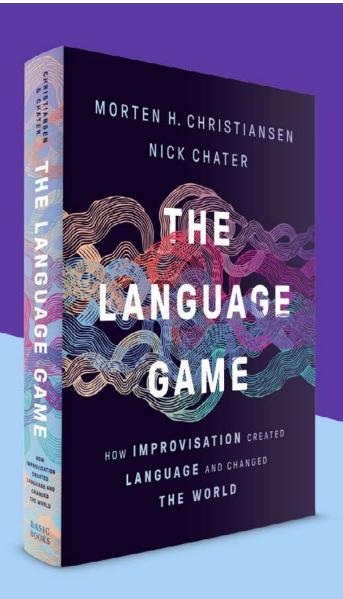
Presenting Author: Kevin O'Neill

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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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 lacono

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: Unversity of Pennsylvania

FT3.2 Linguistic Encoding of Inferential Evidence for **Events**

Presenting Author: Gökcen 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: Meaningmaking 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: Chemnnitz University of Technology; Dr. Tina Morgenstern: Chemnnitz University of Technology; Franziska **Bocklisch**: Chemnnitz University of Technology

FT5.5 Implementing Riemannian Geometry Based **Cognitive Brain Computer Interfacesin 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: Qiangian Wan

Qiangian 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

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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

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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

FT10.4 Feedback-related and Task-dependent Posterror 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 Mexico, 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 Turkishlearning children's recency bias

Presenting Author: Zeynep Adıgüzel

Zeynep Adıgüzel: 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. Prislan

Laura M. Prislan: 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 Marbura and University of Leipzig; Christopher Stolz: Leibniz Institute for Neurobiology; Erik M. Mueller: University of Marburg; Dominik M **Endres**: Philipps-Universitaet

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

Haovin 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 Disadvantageous 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 Altercententric 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 Dev

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; Przemyslaw Zywiczynski: Nicolaus Copernicus University; Slawomir Wacewicz: 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

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FT21.1 A task-general model of human randomization

Presenting Author: Sami R Yousif

Sami R Yousif: Yale University; Samuel David McDougle: Yale Univeristy; 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., nonprime) 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

AadilMehdi 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 Necaise

Aaron Necaise: 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; Chaning 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 Gakugei 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 interacion

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

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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 Costeffective 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: Unversity of Pennsylvania

FT27.2 Viewers Spontaneously Represent Event **Temporal Structure**

Presenting Author: Yue Ji

Yue Ji: Beijing Institute of Technology; Anna Papafragou: Unversity 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

Jniversity

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

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

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'Seaghdha**: 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

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 Göksun: Koç University

COGNITIVE

DIVERSITY

FT38.1 The cognitive neuroscience of social learning in human evolution

Presenting Author: Heidi Øhrn

Heidi Øhrn: Depatment 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 Göksun: 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 sociosemantic 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; Cassondra 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: Hariot-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 registersituation 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:

Unversity 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 Mexico, 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 Checkerboards 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 Vrantsidis

Thalia Vrantsidis: 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

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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 Apsel

Molly Apsel: 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

Gvu-Ho Shin: Palacký University Olomouc; Seongmin Mun: **Chosun University**

FT49.2 The contingency symmetry bias as a foundation of word learning: Evidence from 8-montolds 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:

Unversity 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 Göttinaen

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: Universitat 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 Paraiba; 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 Gakugei 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 Aleven**: 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 Avcı: 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 Avcı

Can Avcı: 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

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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: Vieran Keric

Vjeran 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

leff 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 Hacımusaoğlu: 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; Jacolien 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

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 **Brainless 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

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

Tsuvoshi Kohatsu: University of the Basque Country: Sho **Akamine**: Max Planck Institute for Psycholinguistics; **Akari Omine**: transcosmos 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 Beggiato: 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

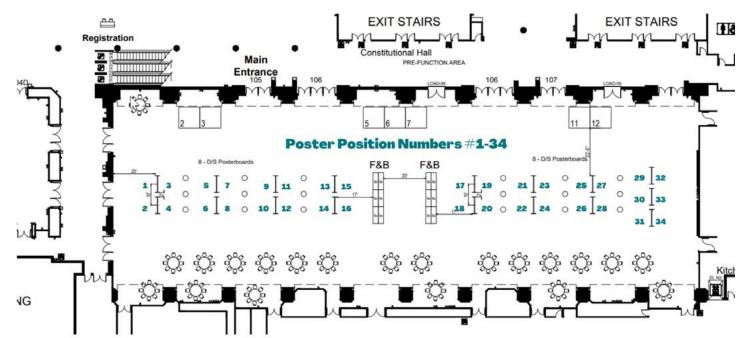
Presenting Author: Dr. Jamie Amemiya

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



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 wordlearning

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

COGNITIVE

DIVERSITY

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 Reves

Stacey Reyes: Western University; Laura Batterink: Western

University

P1-10-1798 Can children recognize pedagogical intent in the prosody of speech?

Presenting Author: Igor Bascandziev

Igor Bascandziev: 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 Ian Wilschut: University of Groningen: Florian Sense: University of Groningen; Maarten van der Velde: University of Groniningen; Hedderik van Rijn: University of Groningen

P1-24-1888 Investigating Expert and Novice **Programming Problem Solving**

Presenting Author: Maria Vorobeva

Maria Vorobeva: 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 Göksun: Koc 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; Jessecae 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 Grimminger: 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 **aualities**

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

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

Berkelev

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 highvalue items?

Presenting Author: Nikolas McNeal

Nikolas McNeal: The Ohio State University; Blair Shevlin: The Ohio State University; Ian Krajbich: 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 Reinholtz: 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 Lebuda: 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 Lebuda: 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 Philosphy 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 openended 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

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; **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

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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 domaingeneral 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 Pleșca

Ana-Maria Plesca: Humboldt Universität zu Berlin: Katia 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 Helpina

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

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 Gotlieb 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 Matusevych

Yevgen Matusevych: 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 Matusevych:

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; Dîlan 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: Unviersidad 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

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: Unviersity 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 Marjieh

Raja Marjieh: 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 Snefjella

Bryor Snefjella: 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

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 Nationa

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

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P6-20-1227 The relation between gaze and turntaking 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 Vogeley: 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-Universitaet; Frederick Zittrell: Marburg University; Uwe Homberg: Philipps Universität Marburg; Dominik **M Endres**: Philipps-Universitaet

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 Graphbased 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 featurebased, 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





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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

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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: Eve-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 Groniningen; 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

