

Program & Abstracts Book



SOCIAL COGNITION, DECISION MAKING & COMMUNICATION

Integrating Neuroscience and
Artificial Intelligence

May 19-20, 2025 —————
————— Saclay, France

NeuroPSI

NeuroPSI is the joint Neuroscience Institute of the CNRS and Université Paris-Saclay, the leading science-focused University in France

The 25 teams / 250 people of the institute aim to understand the organization and operation of the neural circuits that control behavior using multidisciplinary and multi-scale approaches

université
PARIS-SACLAY

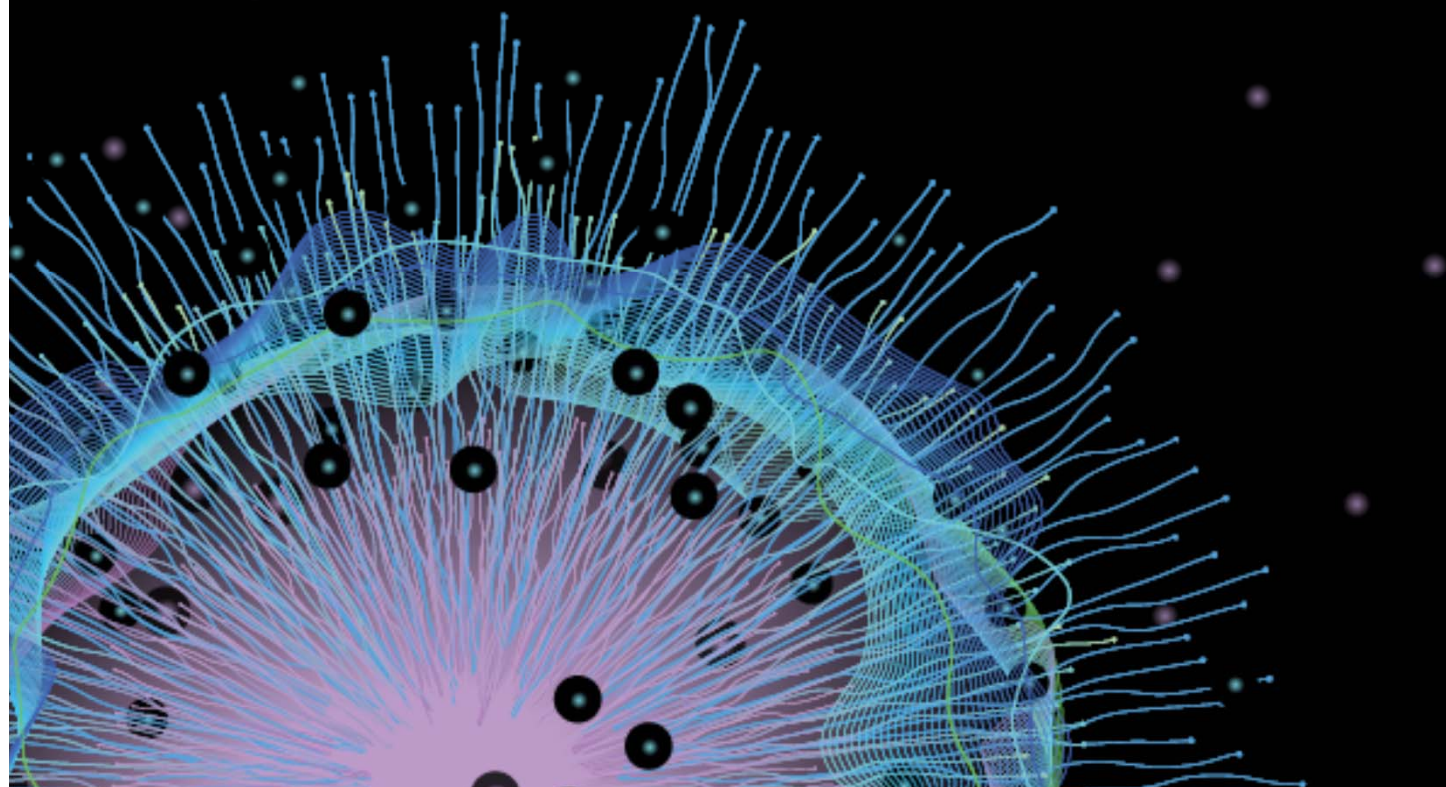
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CHEN TIANQIAO & CHRISSEY INSTITUTE

The Tianqiao and Chrissy Chen Institute was created in 2016 with a US \$1 billion commitment to help advance brain science.

Our vision is to improve the human experience by understanding how our brains perceive, learn and interact with the world.

www.ChenInstitute.org



Program

Starts at	Duration	Day 1 Monday May 19 - SOCIAL COGNITION AND ADAPTIVE BEHAVIOR	
09:15	00:05	François Rouyer	Welcome to NeuroPSI
09:20	00:10	Yan Li	The Chen Institute
09:30	00:45	Session 1 Social cognition and emotion <i>Chair: Cyrille Vaillend</i>	Christian KEYSERS A cross-species approach to the neural bases of empathy and prosociality.
10:15	00:45		Ewelina KNAPSKA Emotional echoes: how negative and positive emotions of others shape environmental adaptation.
11:00	00:30		Coffee break
11:30	00:45		Jacqueline CLAUSS Mapping Fear Generalization as Risk for Psychiatric Disease.
12:15	00:45		Short talk: to be selected Short talk: to be selected
13:00	02:00	Lunch + posters	
15:00	00:45	Session 2 Social decision-making <i>Chair: Marion Rivalan</i>	Sylvie GRANON Interplay between social and non social decision-making.
15:45	00:45		Diego SCHEGGIA Neural circuits for social decision-making.
16:30	00:30		Coffee break
17:00	00:25		Short talk: to be selected
17:25	00:45		Lola CAÑAMERO Emotion, Social Cognition, Decision Making and Communication: Where Can Robots and Neuroscience Meet?
18:10	00:50	Posters	
19:00	03:00	Dinner at Golf de Marivaux, Janvry 19:30 Bus service leaves NeuroPSI at 19:00 Return bus at 23:00 to Paris Porte d'Orléans and Le Guichet RER station	

Starts at	Duration	Day 2 Tuesday May 20 - COMMUNICATION & LANGUAGE	
09:30	00:45	Session 3 Language <i>Chair: Christophe Pallier</i>	Simon TOWNSEND Evolution of syntax: insights from great ape communication..
10:15	00:45		Adrien MEGUERDITCHIAN The origins of human language: Insight from neuroethology of gestural communication in nonhuman primate.
11:00	00:30		Coffee break
11:30	00:45		Jean-Rémi KING Towards a neural code for language.
12:15	00:45		Short talk: to be selected Short talk: to be selected
13:00	02:00	Lunch + posters	
15:00	00:45	Session 4 Social communication <i>Chair: Nicolas Giret</i>	Isabelle CHARRIER Onset of individual vocal recognition in Pinnipeds.
15:45	00:45		Richard HAHNLOSER Data Science Approaches to Brain, Meaning, and the Evolution of Animal Vocalizations.
16:30	00:30		Coffee break
17:00	00:25		Short talk: to be selected
17:25	00:45		Jan CLEMENS Uncovering the secret social live of fruit flies with computational tools.
18:10	00:10	Cyrille VAILLEND Concluding remarks of the Organizing Committee	

About our Invited Speakers

Lola Cañamero



Lola Cañamero is Full Professor and INEX Chair of Neuroscience and Robotics at CY Cergy Paris University, which she joined as a member of the ETIS Lab (UMR8051) in September 2020, after having spent 20 years at the University of Hertfordshire in the UK. She holds an undergraduate degree ("Licenciatura") in Philosophy from the Complutense University of Madrid, Spain, and a PhD in Computer Science (Artificial Intelligence) from the University of Paris-XI, France. She turned to Embodied AI and robotics as a postdoctoral fellow in the groups of Rodney Brooks at MIT (USA) and of Luc Steels at the VUB (Belgium). Since 1995, her research has investigated the interactions between motivation, emotion and embodied cognition and (inter-)action from the perspectives of adaptation, development and evolution, using autonomous and social robots and artificial life simulations. She has played a pioneering role in nurturing the emotion modeling community. She is author or co-author of over 150 peer-reviewed publications in the above topics.

Isabelle Charrier



Isabelle Charrier is a CNRS Director of Researcher at the Paris Saclay Institute of Neuroscience.

She is an internationally renowned researcher mostly focused on the study of vocal communication system and social structure in pinnipeds.

All her work is conducted on free-ranging wild animals by performing behavioural experiments in the field in an uni- and multi-modal context.

Jacqueline Clauss



Dr. Jacqueline (Jacci) Clauss is an Assistant Professor and a child, adolescent, and adult psychiatrist at the Maryland Psychiatric Research Center, Department of Psychiatry, University of Maryland Medical School and a staff psychiatrist at Massachusetts General Hospital (MGH). She earned a BA in Neuroscience from Johns Hopkins University, a PhD in Neuroscience at Vanderbilt University in the laboratory of Dr. Jennifer Blackford, and an MD at Vanderbilt University School of Medicine. She completed her adult, child, and adolescent psychiatry clinical training at MGH and McLean Hospital. She is the Chen Institute Transformative Scholar in Neuroscience at MGH. Her research focuses on using structural and functional MRI to identify trajectories of risk and resilience among individuals with early psychotic symptoms

Jan Clemens



2002-2007 Studies of Biology at Humboldt-University in Berlin, Germany
2007-2012 Phd in Computational Neuroscience at the Bernstein Center for Computational Neuroscience in Berlin, Germany
2012-2017 Postdoc with Mala Murthy at the Princeton Neuroscience Institute, USA
2017-2023 Independent Junior Group Leader at the European Neuroscience Institute in Göttingen, Germany
since 2023 Professor of Auditory Neuroscience at the Dept. of Neuroscience, Oldenburg University, Germany

Sylvie Granon



After a PhD in Marseille in 1995, a first postdoc in Cambridge and a second postdoc in the Pasteur institute in Paris, **S. Granon** obtained a tenure position in the Pasteur institute in 2001 followed by a professorship position in Paris Sud university (now Paris-Saclay) in 2008 to establish her own team. The research of her team is dedicated to the understanding of the neural and neurochemical bases of decision-making thanks to the design of novel behavioral tasks in mice. In particular, she designed social tasks and a Mouse Gambling Task which allows the manipulation of probabilistic reward delivery. With her team, she unraveled individual strategies and showed that they rely on individual levels of regional brain monoamines and on the interplay between the prefrontal cortex, the reward system and limbic circuits. The team now investigates how manipulations of these circuits by exposure to various environmental factors (social environment, sleep restriction, stress or specific food rewards) can trigger, shape or reshape, at different ages of life, individual decision-making strategies.

Richard Hahnloser



Prof. Richard Hahnloser is a Full Professor at the University of Zurich and ETH Zurich. He co-directs the Institute of Neuroinformatics. He leads a songbird research group since 2003. His research focuses on neuroscience, computational modeling, and birdsong learning. He serves on the Steering Committee of the NCCR Evolving Language and is the creator of VoCallBase <https://vocalbase.evolvinglanguage.ch/>. He is also interested in natural language processing and has developed tools such as <https://endoc.ethz.ch/> to assist with scientific discovery.

Christian Keysers



Prof. Dr. Christian Keysers is a social neuroscientist at the Netherlands Institute for Neuroscience, and full professor for Social Neuroscience at the University of Amsterdam. His work combines rodent and human studies to understand how the brain makes us empathic and prosocial. His work was cited >39'000 times. He is an ERC laureate, member of the Academia Europaea, Fellow of the Association for Psychological Science and authored of the award-winning book *The Empathic Brain*.

Jean-Rémi King



I am a CNRS researcher at [École Normale Supérieure](#) currently detached to [Meta AI](#), where I lead the [Brain & AI team](#). This team aims to identify the brain and computational bases of human intelligence, with a focus on language. For this, we develop deep learning algorithms to decode and model brain activity recorded with [MEG](#), [EEG](#), [electrophysiology](#) and [fMRI](#).

Ewelina Knapska



Prof. Ewelina Knapska is a neuroscientist specializing in the neural mechanisms of social behavior and emotions. She leads a research group at the Nencki Institute of Experimental Biology in Warsaw, where she investigates empathy-like behaviors, social learning, and neuroplasticity. Prof. Knapska has served as Vice President of the Centre of Excellence for Neural Plasticity and Brain Disorders (BRAINCITY). She is the current president of the European Brain and Behaviour Society (EBBS) and an advocate for science outreach and diversity in research.

Adrien Meguerditchian



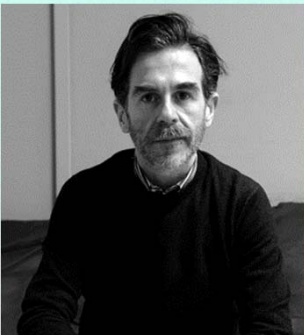
CNRS Researcher, Primatologist, at the Center of Recherche in Psychology & Neurosciences (CRPN, CNRS/Univ Aix-Marseille) in team DePhy (Development & Phylogeny)

Research on the communicative gestural system of nonhuman primates and its cerebral specialization within a comparative approach with human language

Lecturer in comparative cognition, comparative neuropsychology and ethology at the CNRS, INSERM, ISRP, Université Aix-Marseille, Université Lumière Lyon 2, Université Toulouse III Paul Sabatier, and l'Université Paris Sorbonne.

Laureat : Fyssen Foundation, ANR 2012, ERC Starting 2016, Prix Paoletti CNRS 2017, Médaille de Bronze CNRS 2021, ANR 2023

Diego Scheggia



Born and raised in the rolling hills of Marche, Italy, Diego Scheggia moved to Parma where he completed his undergraduate studies in Biological Sciences. As part of his undergraduate program, he studied at the University of Groningen in The Netherlands, where he developed a strong interest in neuroscience and psychology. His growing fascination with the influence of genetics on behavior led him to pursue doctoral studies in neuroscience. In 2013, he obtained his Ph.D. from the Italian Institute of Technology in Genoa under the supervision of Francesco Papaleo. Following his doctoral studies, he joined the Center for Psychiatric Neuroscience at CHUV Hospital in Lausanne, Switzerland, in 2014 as a postdoctoral researcher under the mentorship of Ron Stoop. During this period, his research focused on investigating the role of the basolateral amygdala in emotion-driven decision-making processes.

After a short time as senior researcher at the Italian Institute of Technology, Diego Scheggia was appointed Assistant Professor on tenure track at the Department of Pharmacological and Biomolecular Sciences, University of Milan, in 2020. His current research focuses on understanding the fundamental mechanisms that govern social behavior and decision-making processes. He serves as a member of the Ethical Review Board for Animal Welfare and is also a former Veronesi and MSCA fellow, and Cariplo Independent Investigator.

Simon Townsend



I received my bachelors in Biological Sciences from the University of Oxford in 2005. I then moved to Scotland to conduct my PhD with Klaus Zuberbühler in the School of Psychology at the University of St Andrews. The focus of my research was on the vocal communication skills of wild chimpanzees in the Budongo Forest, Uganda. In 2008 I took up a post-doc position with Marta Manser at the University of Zurich to work on meerkat vocal communication and cognition at the Kalahari Meerkat Project in South Africa. In 2015, I returned to the UK as an Assistant Professor in Language and Learning, in the Department of Psychology, University of Warwick. I remain an Associate Professor at the University of Warwick but in 2017 accepted a Swiss National Science Foundation-funded Professorship in the Department of Comparative Linguistics, University of Zurich. In 2023 I was promoted to Associate Professor in the Department of Evolutionary Anthropology, UZH where my Comparative Communication and Cognition group is now based.

Abstracts of selected short talks

Abstracts of selected posters



NeuroPSI – Chen Institute
Joint conference on Brain, Behavior & Beyond

The organizing committee is composed of NeuroPSI researchers

Coordinator: Cyrille Vaillend

NeuroPSI-Chen Institute Liaison: Valérie Doyère & François Rouyer

Members: Jean-Marc Edeline, Isabelle Charrier, Marion Rivalan,
Sylvie Granon.

Chen writers reporting on the conference: Moran Aharoni, Léa
Ceschi, Nastasia Mirofle.