



Hybrid Minds: Brain, Behavior and Society in the Age of AI

20th Annual Conference of the Italian Association for Cognitive Sciences

September 18-20, 2024 - Rome, Italy

September 18			
10:15- 10:30	Room V Welcome and Institutional Greetings		
10.30- 11:30	Keynote Room V Beate Krickel Individuating Cognitive Capacities in Terms of Cognitive Homology TU Berlin Chair: Gustavo Cevolani		
11:30-12:45	Room IX <i>Extended cognition</i> Chair: Marco Viola	Room II <i>Morality</i> Chair: Marco Marini	Room V <i>Explanation I</i> Chair: Davide Coraci
11:30-11:55	Inside-out: thought-experiments, scientific simulations and the economy of extended cognition Daniel Dohrn (Milan)	Delegation of morality to AI: what tasks do we want to delegate? Philippe Roman Sloksnath (Zurich, CH)	How can the new mechanist philosophy accommodate degenerate mechanisms? Yichu Fan (Edinburgh, UK)
11:55-12:20	Extended mind and diachronical personal identity Fabio Patrone (L'Aquila)	Morality, debunking, and diagnoses of irrationality Alice Andrea Chinaia & Gustavo Cevolani (Lucca)	Program-based Explanation Nicola Zagni & Edoardo Datteri (Milan)
12:20-12:45	Navigating creativity: comparing human and AI artistic processes Joachim Nicolodi (Cambridge, UK)	AI and social corrections: shaping norms against misinformation sharing Eugenia Polizzi, Giulia Andrighetto & Carlo Ciucani (Rome)	The rationality of mental imagery Francesco Marchi (Bochum, DE)
12.45-14.00	LUNCH		

14:00-15:40	Room VIII SYMPOSIUM <i>Emotions, sociality and cognition</i> Organizer: Laura Barca	Room IX <i>Consciousness</i> Chair: Marco Fasoli	Room II <i>Interaction I</i> Chair: Silvia Larghi	Room V SYMPOSIUM <i>Sustainable behavioral change for climate crisis</i> Organizer: Giulia Andrighetto
14:00-14:25	Interoceptive grounding of conceptual knowledge Laura Barca (Rome)	In search of embodied consciousness Giulia Piredda & Laura Coccia (Pavia)	Is hardware the body of artificial minds? The anthropomorphism of machines Cristiano Castelfranchi (Rome)	Growing polarization around climate change on social media Andrea Baronchelli (London, UK)
14:25-14:50	Abstract concepts' vagueness: uncertainty and social interaction Anna M. Borghi (Rome)	I am looking for a (permanent) center of gravity. How Daniel Dennett's prophecy about AI and the self has been, at least partially, confirmed and	Not only nationality: A multicultural perspective in human-robot interaction Cecilia Roselli, Leonardo Lapomarda & Edoardo Datteri (Milan)	Social tipping intervention to promote the adoption of reusable food packaging solutions Gian Luca Pasin (Rome)
14:50-15:15	Ingestible sensors highlight the relationship between stomach pH and virtual reality induced stress in healthy humans Vanessa Era, Arianna Vecchio, Sofia Ciccarone, Maria S. Panasiti, Giuseppina Porciello & Salvatore M. Aglioti (Rome)	The code is willing, but the hardware is weak. The role of the body in shaping potential artificial consciousness Federico Zilio (Padova)	Enhancing trust in human-robot interaction: an integrated approach to knowledge representation in AI Luca Biccheri & Roberta Ferrario (Trento)	From business to society: a new framework for climate services Marcello Petitta (Rome)
15:15-15:40	Sex/gender differences in pathogen disgust and the nature-nurture debate Marco Tullio Liuzza & Giuseppe Occhiuto (Catanzaro)		Structuring human-AI collaboration: an enactive framework for modelling heterogeneous cognitive systems Julian Zubek, Łukasz Jonak & Joanna Rączaszek-Leonardi (Warsaw, PL)	Widening the scope: the direct and spillover effects of nudging water efficiency in the presence of other behavioral interventions Jacopo Bonan (Brescia)

15:40-16:05	COFFEE BREAK			
16:05-17:20	<p>Room VIII <i>Interaction II</i> Chair: Eugenia Polizzi</p>	<p>Room IX <i>Explanation II</i> Chair: Cristiano Castelfranchi</p>	<p>Room II <i>Human Kinds</i> Chair: Giulia Piredda</p>	<p>Room V <i>Concepts & Emotions</i> Chair: Claudia Mazzuca</p>
16:05-16:30	<p>Joint guidance: a capacity to jointly guide Marco Mattei (Milan)</p>	<p>Is it a bug or is it a feature? Decisional enhancement, autonomy, and rationality in the digital age Camilla Colombo (Aachen, DE)</p>	<p>Questioning the boundaries of addiction Davide Serpico & Francesco Guala (Milan)</p>	<p>Investigating the influence of interoceptive accuracy on the classification of abstract and concrete concepts during pregnancy Salvatore Diana, Anna Borghi & Laura Barca (Rome)</p>
16:30-16:55	<p>Mapping the psychophysiology of commitment Angelica Kaufmann, John Michael, Luke McEllin, Corrado Sinigaglia, Stephen Butterfill, Guido Barchiesi & Martina Fanghella (Milan)</p>	<p>The superbug: mental models and errors in computer programming Silvia Larghi & Edoardo Datteri (Milan)</p>	<p>Clarifying the muddle. Towards a comprehensive taxonomy of cognitive biases in medicine Cristina Amoretti (Genova) & Elisabetta Lalumera (Bologna)</p>	<p>DiffuseFace: a database of AI-generated face portraits of non-existing people to enrich diversity in face research Alessia Firmani and Luca Cecchetti (Lucca)</p>
16:55-17:20	<p>At first glance: investigating how vagueness influences verbal and non-verbal shared understanding of concepts among couples Chiara De Livio, Claudia Mazzuca, Viola Chillura, Valerio Sperati, Anna M. Borghi (Rome)</p>	<p>Generative AI and the overextended mind: on legal ownership of our cognitive extensions Fabio Paglieri (Rome)</p>	<p>AI in forensic evaluations: just smoke and mirrors or an incoming revolution? Camilla Frangi, Alexa Schincario & Cristina Scarpazza (Padoa)</p>	<p>Increasing emotional distancing with prism glasses: dissociated gender and adaptation direction effects on alexithymia in healthy individuals? Laura Culicetto, Selene Schintu, Chiara Lucifora, Massimo Mucciardi, Alessandra Falzone, Carmelo Mario Vicario (Messina)</p>

17:20-18:20

Keynote | Room V

Stefano Nolfi

**Integration and Transfer of Action and Language Knowledge
in Learning Robots**

Institute of Cognitive Sciences and Technologies

National Research Council (ISTC-CNR)

Chair: Anna M. Borghi

September 19

<p>9:00-10:00</p>	<p align="center">Keynote Room V Transforming Body Perceptions through the Senses: Innovative Neuroscientific Approaches and Applications Ana Tajadura-Jiménez Universidad Carlos III de Madrid Chair: Luca Tummolini</p>			
<p>10:00-11:15</p>	<p align="center">Room VIII <i>Cooperation</i> Chair: Antonella Tramacere</p>	<p align="center">Room IX <i>Language</i> Chair: Aldo Gangemi</p>	<p align="center">Room II <i>Perception & Action</i> Chair: Nicola Di Stefano</p>	<p align="center">Room V <i>Trust</i> Chair: Edoardo Datteri</p>
<p>10:00-10:25</p>	<p>Language-based game theory in the age of artificial intelligence Veronica Pizziol (Bologna), Valerio Capraro (Milan), Roberto Di Paolo (Parma) & Matja Perc (Maribor)</p>	<p>Do neural language models have narrative coherence? Alessandro Acciai, Lucia Guerrisi & Rossella Suriano (Messina)</p>	<p>Action in multimodal object perception Aleksandra Mroczko-Wasowicz & Spencer Ivy (Warsaw)</p>	<p>From expert testimony to lay belief: a Bayesian view Pietro Avitabile & Gustavo Cevolani (Lucca)</p>
<p>10:25-10:50</p>	<p>The effect of heterogeneous distributions of social norms on the spread of infectious diseases Daniele Vilone, Eva Vriens & Giulia Andrighetto (Rome)</p>	<p>How does sentence specificity shape uncertainty and curiosity in conversational dynamics? Tommaso Lamarra, Caterina Villani, Claudia Mazzuca, Anna M. Borghi & Marianna Bolognesi (Bologna, Roma)</p>	<p>Exploring inner speech influence on novel action acquisition and execution Angelo Mattia Gervasi, Claudia Mazzuca, Claudio Brozzoli & Anna Borghi (Roma, Lyon)</p>	<p>Evaluating trust dynamics with dependency networks Alessandro Sapienza & Rino Falcone (Rome)</p>
<p>10:50-11:15</p>	<p>Tiny dictators: understanding altruism in young children Marco Marini, Sebastiano Munini, Michela Carlino & Fabio Paglieri (Rome)</p>	<p>Lost in the labyrinths of stories: The role of negation and contradiction in LLMs' understanding of narratives Emanuele Bottazzi & Roberta Ferrario (Trento)</p>	<p>The evolution of syntax: toward a minimal model of hierarchical cognition Giulia Palazzolo (Warwick)</p>	<p>Artificial intelligence and institutional trust: promise or peril? Ginevra Prelle (Milan)</p>

11:15-11:40	COFFEE BREAK			
11:40-13:20	<p>Room VIII SYMPOSIUM <i>Recent work in the epistemology of imagery and imagination</i> Organizer: Alfredo Vernazzani</p>	<p>Room IX <i>Modeling</i> Chair: Emanuele Bottazzi</p>	<p>Room II <i>Decision Making</i> Chair: Francesco Bianchini</p>	<p>Room V SYMPOSIUM <i>Multimodal integration between perception and action: cognitive, neural, and computational mechanisms</i> Organizer: Luca Tummolini</p>
11:40-12:05	<p>Aphantasia, unconscious imagery, and rationality Joshua Myers (Barcelona)</p>	<p>Ranking cognitive plausibility of computational models of analogical reasoning with the Minimal Cognitive Grid: results and implications Alessio Donvito & Antonio Lieto (Bari)</p>	<p>Truth approximation, calibration and bias in human judgment Davide Coraci & Gustavo Cevolani (Lucca)</p>	<p>Decoding haptic information and motor preparation in the early visual cortex Simona Monaco (Trento)</p>
12:05-12:30	<p>Maps of the imagination: a theory of artifact-based understanding Alfredo Vernazzani (Bochum, DE)</p>	<p>The Minimal Cognitive Grid+, universal cognition and perceptual performance Selmer Bringsjord, Paul Bello & James T Oswald (Albany, NY US)</p>	<p>Moral and social nudges for promoting cooperation in wicked social dilemmas: a theoretical and experimental investigation on waste sorting behavior Sebastiano Munini, Marco Marini & Fabio Paglieri (Rome)</p>	<p>Peripersonal space: a multisensory interface for the interaction between the body and the surrounding objects Claudio Brozzoli, (Lyon, FR)</p>
12:30-12:55	<p>Imaginative justification and imagistic reasoning Sofia Pedrini (Bochum, DE)</p>	<p>Deductive flexibility in humans and beyond: testing the tool with synthetic datasets Mariusz Urbanski, Paweł Łupkowski, Tomáš Ondráček & Ganna Stoyatska (Poznań, PL)</p>	<p>Integrating VR and neuropsychometrics: Predicting consumer preferences via submental muscle activity Francesca Ferraioli, Carmelo</p>	<p>Goal formation in multimodal space: a topological alignment approach Francesco Mannella, Julian Zubek & Luca Tummolini (Rome)</p>

			Mario Vicario, Chiara Lucifora, Viviana Betti, Matteo Marucci (Messina)	
12:55-13:20	The epistemic role of embodiment for imagination (and its lack in AI) Zuzanna Rucińska (Antwerp, BL)	Evaluating Dream Semantics to discover patterns in personality traits and creative abilities Aldo Gangemi, Chiara Lucifora & Claudia Scorolli (Bologna)	Unmasking stress: gender differences in decision making under mild hypoxia Stefania Pighin, Alessandro Fornasiero, Marco Testoni, Barbara Pellegrini, Federico Schena, Nicolao Bonini & Lucia Savadori (Trento)	From motor representations to language and back Gabriele Ferretti (Bergamo) and Silvano Zipoli Caiani (Florence)
13:20-14:30	LUNCH			
14:30 - 16:00	Room V The Synthetic Method in the Age of AI A symposium in honor of Roberto Cordeschi Chair: Emiliano Ippoliti From surrogative reasoning to surrogative simulation Edoardo Datteri (Milan) The synthetic method in cognitive robotics for interaction Alessandra Sciutti (Genoa) Synthesizing autonomy: from biology to robots and back Vieri Giuliano Santucci (Rome)			
16:00 - 16:20	COFFEE BREAK			

16:20-18:00	<p>Room VIII SYMPOSIUM <i>On the attribution of cognitive and emotional states to autonomous and intelligent systems</i> Organizers: Silvia Larghi, Marco Facchin & Giacomo Zanotti</p>	<p>Room IX <i>Perception</i> Chair: Marco Fasoli</p>	<p>Room II SYMPOSIUM <i>(Allegedly) AI-generated media: how do they make us feel?</i> Organizers: Dominique Makowski & Marco Viola</p>	<p>Room V SYMPOSIUM <i>Music perception and cognition: crossmodal, cross-cultural, and cross-species approaches</i> Organizer: Nicola Di Stefano</p>
16:20-16:45	<p>How people understand robots' mind: folk-psychology vs. folk-cognitivism Silvia Larghi and Edoardo Datteri (Milan)</p>	<p>Block on non-conceptual color perception Ivan Cotumaccio (St Louis, US)</p>	<p>Are androgynous faces uncanny? Antonio Olivera-La Rosa (Medellín, CO)</p>	<p>Crossmodal associations involving musical stimuli. Cross-cultural evidence Nicola Di Stefano (Rome)</p>
16:45-17:10	<p>Making emotional transparency transparent Giacomo Zanotti (Milan) & Marco Facchin (Antwerp, BE)</p>	<p>Perceiving emotions: a multimodal approach Niccolò Nanni (Lugano, CH)</p>	<p>Emotional response toward fiction and the underlying cognitive mechanisms Marco Sperduti (Paris, FR)</p>	<p>Music perception and action: embodiment, dyadic dance, and interpersonal synchronization Giacomo Novembre (Rome)</p>
17:10-17:35	<p>Substituting/complementing humans: a cognitive and affective analysis Guido Cassinadri (Pisa)</p>	<p>Amodal completion as a means to perceptual beliefs Hamza Naseer (Lugano, CH)</p>	<p>Real is the new sexy Alessandro Demichelis (Lucca)</p>	<p>Rhythm and sound production across species Andrea Ravignani (Rome)</p>
17:35-18:00		<p>Time experiences for survival Antonella Tramacere (Rome)</p>	<p>MusicAI bias: listeners like music less when they think it was performed by an AI Alessandro Ansani (Jyväskylä, FI)</p>	

18:00-19:00	<p>Keynote Room V Douglas Guilbeault Discovering Cognitive Structure using Large-Scale Social Data and Artificial Intelligence Stanford University Chair: Giulia Andrighetto</p>
19:00-19:30	<p>AISC General Assembly</p>
20:30	<p>SOCIAL DINNER Palazzo delle Esposizioni Roma</p>

September 20			
9:00 - 10:00	<p>Keynote Room V Rafael A. Calvo Human Autonomy in an AI World Dyson School of Design Engineering Imperial College London Chair: Marco Fasoli</p>		
10:00 - 10:20	COFFEE BREAK		
10:20-12:00	<p>Room IX SYMPOSIUM <i>Ethical and cognitive perspectives on socio-technical hybrid societies</i> Organizer: Ludovica Marinucci</p>	<p>Room II (Anti)Representationalism Chair: Marco Facchin</p>	<p>Room V SYMPOSIUM <i>The social media debate: Do social media really represent a threat to our society?</i> Organizer: Alberto Acerbi</p>
10:20-10:45	<p>Decision-making and self-control with AI in the loop Vieri Giuliano Santucci (Rome)</p>	<p>Representational realism is not a tenet of cognitive science Claudio Fabbron (Berlin, DE)</p>	<p>The causal impact of Instagram usage on psychological well-being Valerio Capraro (Milan)</p>
10:45-11:10	<p>The ethics of using large language models to predict patients' preferences: a proposal Marco Annoni (Rome)</p>	<p>The propositionalist view on emotion and its relevance for emotional attributions to robots in HRI Ivano Zanzarella (Bari)</p>	<p>Does the problematic use of social media constitute a pathological condition? Possible underlying psychobiological mechanisms Tania Moretta (Padova)</p>
11:10-11:35	<p>Can we get rid of empathy in AI-driven healthcare? Elisabetta Sirgiovanni (Rome)</p>	<p>Grounding values in which environment? Francesco Abbate (Rome)</p>	<p>The skepticism puzzle: a critical examination of disinformation intervention effects Folco Panizza (Lucca)</p>
11:35-12:00	<p>Ethical framework for deception in human-robot interactions Ludovica Marinucci (Rome)</p>		<p>The social media debate: a roundtable Moderator: Alberto Acerbi (Trento)</p>
12:00- 13:00	<p>Keynote Room V AISC Young Researcher Prize 2023 The Fox and the Grapes The Impact of Neuroimaging Data on Cognitive Ontology Marco Viola Università degli Studi Roma Tre Chair: Fabio Paglieri</p>		