

Wednesday, 17 June

8.30-8.55 **Registration Desk** — Location: aula VI

8.55-9.00

9.00-10.00

Francesco Fronterotta (Head, Sapienza Department of Philosophy), Opening

Invited Lecture - Location: aula VI - Chair: Emiliano Ippoliti

James Ladyman (Bristol), *The Limits of Pluralism and Realism*

Location: **aula II** - chair: **G. Minnameier**

Location: **aula VI** - chair: **M. Costa**

Location: **aula IX** - chair: **S. Bangu**

10.00-10.30

Bouchard, Y. - *Inferential Knowledge and Object-Oriented Epistemology*

Larese, C. & Hosni, H. & Ponti, F. - *Polya's fundamental inductive pattern for medical diagnostics*

Prätor, K. - *Two models of Artificial Intelligence*

10.30-11.00

Visokolskis, S. & Chichi, G. M. - *How does Peircean abduction model? A controversial historical argument presumably appealing to Aristotle*

Fasoli, M. & Pinna Pintor, A. - *The more, the merrier? Toward a theory of artifacts' multifunctionality*

Gschwendtner, A. - *Internal Representation and Inference: Model-Based Reasoning within Large Language Models*

11.00-11.20

Coffee break

11.20-11.50

Jetli, P. - *Abduction and Analogical Reasoning in Plato's Euthyphro*

Crupi, V. - *Towards synergistic human-AI interaction: A Bayesian approach*

Gualart, N. - *It's Raining and You're Not Going to Die: Simulated Pragmatic Inferences in LLMs*

11.50-12.20

Pietarinen, A. & Ye, R. - *Triadic information and quasi-minds: Model-based proto-cognition in aneural xenobiotic collectives*

Viola, M. & Petrolini, V. - *Affective Sailors: The Affect Circumplex as a Model for Emotional Regulation*

Graboń, W. & Woźny, M. - *Model-Based Reasoning and Legal Interpretation: The Case of Rational Agents*

12.20-12.50

Park, W. - *Magnani's Manipulative Abduction, Revisited*

Grasso, V. - *Context Drift and Normative Portability: How LLMs Reshape Epistemic Authority in Institutional Reasoning*

Ferrara, C. & Matteacci, I. - *Algorithmic Partners: Epistemological Perspectives on Co-Created Knowledge in Human-AI Scientific Discovery*

Lunch

14.10-15.10

Invited Lecture - Location: aula VI - Chair: Selene Arfini

Marta Bertolaso (Campus Bio-Medico Rome), *Shared Agency in Model-Based Reasoning*

Location: **aula II** - chair: **M. Fasoli**

Location: **aula VI** - chair: **D. Danks**

Location: **aula XI** - chair: **V. Seifert**

15.10-15.40

Trujillo, J. - *Dark Intelligence*

Zennaro, F. - *GDP and Economic Performativity: From Counterperformativity to Theoretical Responsibility*

Symposium: Machine learning meets molecules. Philosophical reflections on AI-driven chemistry and biochemistry

15.40-16.10

Srivastava, Z. - *Representing through Analogical Inference*

Lissack, M. - *The Orthogonality Principle and the Limits of Surrogate Reasoning in AI Systems: When Computational Models Cannot Substitute for Existential Understanding*

Seifert, V. - *Could AI Undermine Standard Scientific Realism?*
Bellazzi, F. - *Does AlphaFold Solve the Protein Folding Problem?*

16.10-16.40

Ruyant, Q. - *Scientific models are not logical models*

Cecchet, M. - *Model-based reasoning in finance: how idealized derivative pricing models are pragmatically used to evaluate overall market efficiency*

Mallory, F. - *Constructing Chemical Manifolds*

16.40-17.00

Coffee break

17.00-17.30

Fabbroni, C. - *A pragmatic account of neural computations in cognitive models*

Fabretti, A. & Pelloni, A. - *Mathematical Formalism, Narrative, and Normative Camouflage in Economic Modeling*

Pinna, S. & Giunti, M. - *Partially inferential behavior and cognitive integration in large language models*

17.30-18.00

Mela Quílez, M. - *When Deep Neural Networks Become Scientific Models. A Pragmatic Representational Approach to AI-Based Atmospheric Modelling*

Ippoliti, E. - *The unreasonable effectiveness, reasonable effectiveness, and eventual ineffectiveness of mathematics on Wall Street.*

Michellini, M. & Šešelja, D. - *A Fit-for-Purpose Epistemology of Highly Idealized Models*

18.00-19.00

Invited Lecture - Location: aula VI - Chair: Matthieu Fontaine

Axel Gelfert (Technische Universität Berlin), *When Models Trespass*

Thursday, 18 June

9.00-10.00	Invited Lecture - Location: aula VI - Chair: James Ladyman Demetris Portides (Cyprus), <i>The function of Abstractions and Idealizations in Scientific Models and Scientific Understanding</i>		
	Location: aula II - chair: D. Chiffi	Location: aula VI - chair: E. Ippoliti	Location: aula IX - chair: V. Crupi
10.00-10.30	Fogarín, T. & De Benedetto, M. & Cevolani, G. - <i>Reconciling Epistemic Utility Theory and Truthlikeness: An Alternative to Proximity</i>	Bianchini, F. - <i>Analogy as model-based reasoning in generative AI systems</i>	Minnameier, G. - <i>Abduction and Abstraction – Peirce, Piaget and a post-Kohlbergian theory of moral development</i>
10.30-11.00	Douglas, N. - <i>When Abduction Preserves Ignorance: On the Missing Upgrade Step in John Woods' Causal-Response Model of Knowledge</i>	Shelley, C. - <i>Artificial intelligence from sociotechnical and eco-cognitive perspectives</i>	Amato, A. - <i>From Rationality to Ordered Emotionality (Affectus Ordinatus): a framework for human and artificial linguistic generation</i>
11.00-11.20	Coffee break		
11.20-11.50	Osta-Vélez, M. - <i>The Price of Compression: Why Efficient Concepts Lead to Biased Reasoning</i>	Datteri, E. - <i>A representational view of biorobotics</i>	Lee-Sursin, J. - <i>Towards an Explanatory Cognitive Model for Blackwell Informativeness</i>
11.50-12.20	Forghani, M. - <i>Contradictory Affordances in Local Context: A Topological Framework</i>	Aguilar, O. & Aguirre, A. - <i>How are scientific concepts birthed? Typing rules of concept formation in theoretical physics reasoning</i>	Gebharter, A. & Osimani, B. & Sikorski, M. & D'Olimpio, E. & Zhang, Z. - <i>A causal account for estimating effects across populations when no causal information is available</i>
12.20-12.50	Amigoni, F. - <i>On the models for automated planning</i>	Danks, D. - <i>AI as methods, not (only) models</i>	Son, S. H. - <i>Residuals as Style: Re-reading Manfred Frank through Abductive Discretization and the Residual Ledger</i>
	Lunch		
14.10-15.10	Invited Lecture - Location: aula VI - Chair: David Danks Sorin Bangu (Bergen), <i>Rule-following and Rule-breaking: How is Scientific Creativity Possible (in the Age of AI)</i>		
	Symposium: Models of Serendipity. How to Map the Role of Chance in Discovery Location: aula II - chair: S. Arfini & M. Costa	Location: aula VI - chair: F. Sterpetti	Location: aula IX - chair: E. Datteri
15.10-15.40	Copeland, S. - <i>Cave Exemplar – Modeller [of serendipity] beware!</i>	Harrell, M. & Danks, D. - <i>A Model of (Conclusion) Confidence</i>	Sans Pinillos, A. - <i>Managing Uncertainty in VUCA Environments: Wargames as Model-Based Reasoning Tools</i>
15.40-16.10	Furlan, S. - <i>Seeker of the Larger View: John Wheeler and His Heuristics, Between Nuclear Fission and Black Holes</i>	Brinz Johannes - <i>What Are Neurocomputational Models?</i>	Roldán Roldán, F. I. & Fontaine, M. - <i>The Fauna of Rigidities</i>
16.10-16.40	McClelland, T. - <i>Saliency, skill and asking the right questions</i>	Dellantonio, S. & Pastore, L. - <i>Model-Based Reasoning and Experimental Constructionism: The Operationist Legacy in Contemporary Psychology</i>	Giovagnoli, R. - <i>Perspectives on Habitual Behavior</i>
16.40-17.00	Coffee break		
17.00-17.30	Costa, M., Iaria S., Giordani F., Arfini S. - <i>When Anomalies Become Possibilities: Serendipity and the Emergence of New Affordances in Scientific Discovery</i>	Segarra, A. - <i>Models, Facts and Bayesian Confirmation</i>	Giordani, A. & Mari, L. - <i>Model-based inference in measurement and AI</i>
17.30-18.00	Barés Gómez, C. & Fontaine, M. - <i>Abduction, Conjectures, and Meaning</i>	Hasnes Beninson, Z. - <i>Formalization does not entail neutrality: evolutionary game theory and the sociobiology controversy</i>	Gordillo-García, A. - <i>Evolutionary Experiments, Islands, and the Epistemology of Reflective Scientific Models</i>
18.00-19.00	Invited Lecture - Location: aula VI - Chair: Marta Bertolaso Viola Schiaffonati (Politecnico Milan), <i>Towards the New Sciences of the Artificial: the Role of Patrick Suppes' Philosophy of Science</i>		
20:30	SOCIAL DINNER – Pepe Verde Restaurant - Viale Gorizia, 38-44, 00198 Roma RM – website: https://pepeverde.eu/		

Thursday, 18 June

9.00-10.00	Invited Lecture - Location: aula VI - Chair: James Ladyman Demetris Portides (Cyprus), <i>The function of Abstractions and Idealizations in Scientific Models and Scientific Understanding</i>
	Location: aula VIII - chair: L. Pastore
10.00-10.30	Obshanska, V. & Urbański, M. & Skorodzievska, M. & Shyiko, S. & Ulaszewska, A. - <i>The Influence of Stimulus Presentation Mode on Creativity Measures: A Modified Alternative Uses Test Study</i>
10.30-11.00	Grasso, L. - <i>From Algorithms to Architectures: Warranting Cross-Realization Generalization in Computational Cognitive Modeling</i>
11.00-11.20	<i>Coffe break</i>
11.20-11.50	Feldbacher-Escamilla, C. & Gebharder, A. & Sikorski, M. - <i>A Causal Theory of Suppositional Reasoning</i>
11.50-12.20	Caterina, G. & Gangle, R. - <i>A minimal reconstruction of EG_{β} logical rules from EG_{α}</i>
12.20-12.50	Thompson, B. - <i>Defining Reversal Negation Using Bipolar Fuzzy Sets</i>
	<i>Lunch</i>
14:10 – 15:10	Invited Lecture - Location: aula VI - Chair: David Danks Sorin Bangu (Bergen), <i>Rule-following and Rule-breaking: How is Scientific Creativity Possible (in the Age of AI)</i>
15:10 – 14:40	
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16:40 – 17:00	<i>Coffee break</i>
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Friday, 19 June

9.00-10.00	Invited Lecture - Location: aula VI - Chair: Lorenzo Magnani Patrizia Palacios (Salzburg), <i>Modeling instability: From ecological collapse to political transitions</i>		
10.00-10.30	Location: aula II - chair: F. Nappo Symposium: <u>Convergence through modeling</u> Giordani, A. & Nappo, F - <i>Stability reconsidered</i>	Location: aula VI - chair: S. Dellantonio Urbanski, M. & Wasielewska, A. - <i>Assessing Explanation Quality Without Ground Truth: A Multi-Layered Approach to Abductive Reasoning in Underdetermined Scenarios</i> Sterpetti, F. - <i>Counterfactuals, models, and logical expressivism</i>	Location: aula IX - chair: G. De Polavieja Martínez-Cazalla, M. D. - <i>Model-Based Dialogical Reasoning with Refined Conjunctions: With and But as Cross-World Operators</i>
10.30-11.00	Knuuttila, T. & Loettgers, A. - <i>A Dependent by design, independent by realization: multiple models of the circadian clock</i>	Sterpetti, F. - <i>Counterfactuals, models, and logical expressivism</i>	Addis, M. - <i>Developing Explanatory Frameworks in Complex Model Based Reasoning Systems Using Category Theory</i>
11.00-11.20	Coffee break		
11.20-11.50	Castellani, E. & Margoni, E. - <i>Cluster transfer and non-independence</i>	Zhang, Z. - <i>A Significance Test for Causal Inference</i>	Location: aula IX - chair: G. de Polavieja Symposium: <u>Abduction and Model-Based Reasoning in Action</u> Park, M. & de Polavieja, G. & Park, W. - <i>Abduction in the Wild: A Case Study in Neuroscience and Biology Labs</i> De Polavieja, G. & Park, W. & Park, M. - <i>Creative and Manipulative Abduction in Animals and AI Agents</i> Sung, D. & Ságodi, A. - <i>Prospects of AI Scientists in Neuroscience: Analogical Reasoning in Focus</i>
11.50-12.20	Hieke, W. - <i>On a Cognitive Consequence Relation</i>	Avitabile, P. & De Benedetto, M. & Peruzzi, E. - <i>Scientific Experts: Which Questions Should We Ask?</i> Chiffi, D. & Tuzet, G. - <i>Abduction and the Precautionary Principle</i>	
12.20-12.50	Drago, A. - <i>Reasoning by Means of an 'Adjunction': Its Relevance for the History Of Mathematics, Logic, and AI</i>		
14.10-15.10	Invited Lecture - Location: aula VI - chair: Cristina Barés Gómez Lorenzo Magnani (Pavia), <i>Beyond Stochastic Parrots. Large Language Models as Superior Masters of the Symbolic: The Jeopardy of Human Creativity in the Age of Cynical AI Ethics</i>		
15.10-15.40	Location: aula II - chair: S. Pinna Schwartz, N - <i>Studies of Innovative Scientific Reasoning and Situated Cognition</i>	Location: aula VI - chair: A. Sans Pinillos Hermkes, R. - <i>Epistemic Feelings and the Dynamics of Knowing and Not-Knowing in the Context of Critical Thinking</i>	Location: aula IX - chair: M. Viola Galdiero, S. - <i>Modeling reasoning under constraints: a Proof-Theoretic approach to Contextuality and Hyperintensionality</i>
15.40-16.10	Lizzadri, A. - <i>Extended Minds Changing Mind: Rationality and Identity Across Conceptual Revolutions</i>	Pregel, F. & Himmelreich, J. - <i>Does AI Deception Risk Establish the Necessity of Mechanistic Interpretability?</i>	Bringsjord, S. & Govindarajulu, N. S. & Bringsjord, A. - <i>Heterogeneous Abductive Logics</i>

Rooms II and VI are located on the ground floor, while Rooms VIII and IX are on the first floor.

Colour key	
	Invited lecture
	Symposium
	Talk parallel sessions
	Lunch / coffe break
	Social dinner

