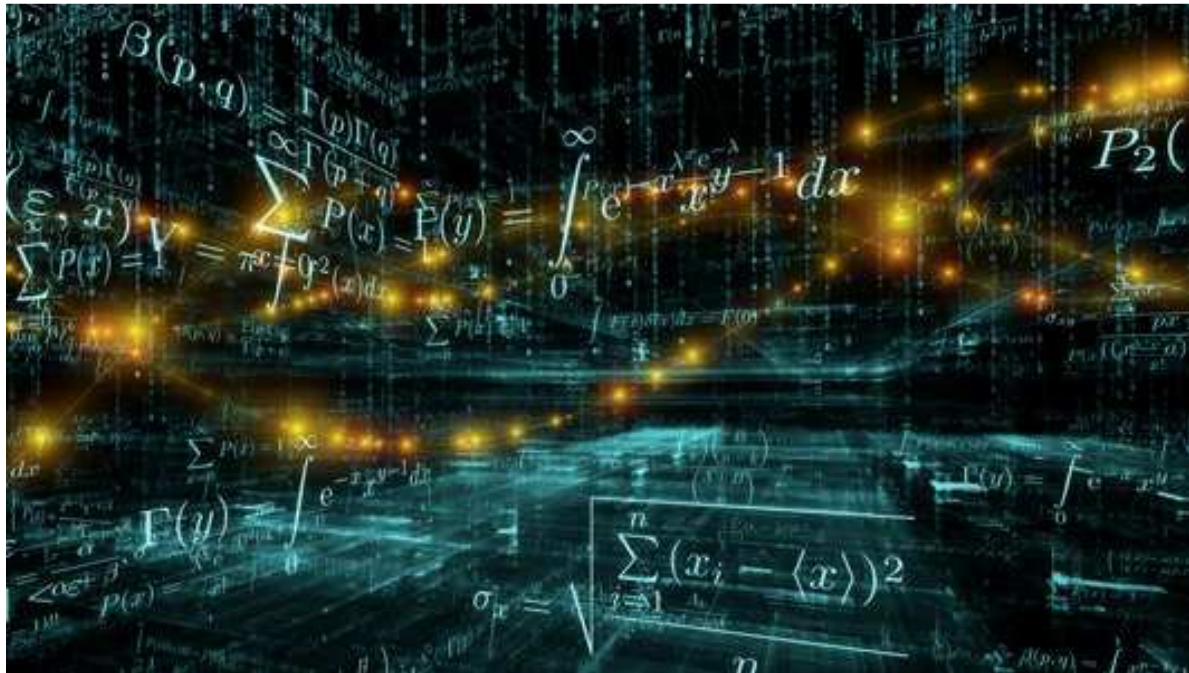


# Models & Inferences in Science



Science continually contributes new models and rethinks old ones. The way inferences are made is constantly being re-evaluated. The practice and achievements of science are both shaped by this process, so it is useful to understand how models and inferences are made. This conference sets out to investigate the way we employ these tools. Different viewpoints will be examined. Discussion will include: the role of the models; how science shapes our conceptions of models; how to model the pursuit of scientific knowledge; the relation between our conception of models and our conception of science; the comparison of different models in different scientific domains; models and scientific explanation; models in the semantic view of theories; the applicability of mathematical models to the world; our conceptions of inference in our conceptions of science; the relation between models and inferences; inference as a means for acquiring new knowledge.

**Rome, Villa Mirafiori – Via Carlo Fea, 2  
11-13 September 2014, Room XII**

Open to the public



**SAPIENZA**  
UNIVERSITÀ DI ROMA

Department of Philosophy  
Ph.D. Program in Philosophy

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## Program

### Thursday 11 September 2014

- 10:00-10:10 Opening: **Stefano Petrucciani** – *head Department of Philosophy*
- 10:10-11:10 **James Ladyman** (University of Bristol), *Revisiting the Semantic Approach*
- break
- 11:30-12:30 **Lorenzo Magnani** (University of Pavia), *Scientific Models Are Distributed and Never Abstract*
- Chairman: Thomas Nickles
- 15:00-16:00 **Emiliano Ippoliti** (Sapienza University of Rome), *Ways of advancing knowledge. A lesson from knot theory and topology*
- 16:00-17:00 **Carlo Cellucci** (Sapienza University of Rome), *Models of Science and Models in Science*
- break
- 17:20-18:20 **Thomas Nickles** (University of Nevada – Reno), *Toward a Frontier Theory of Inquiry*
- Chairman: Emily Grosholz
- 20:30 Social Dinner

### Friday 12 September

- 10:30-11:30 **Fabio Sterpetti** (Sapienza University of Rome), *Scientific Realism, the Semantic View of Theories and Evolutionary Biology*
- break
- 11:50-12:50 **Juha Saatsi** (University of Leeds), *Models, Idealisations, and Realist Commitments*
- Chairman: Lorenzo Magnani
- 15:30-16:30 **Raffaella Campaner** (University of Bologna), *Representing, Explaining and Intervening: On Modeling Disorders*
- 16:30-17:30 **Emily Grosholz** (Penn State University), *Solar System, Galaxy, Cosmos: How Models Work in Astronomy*
- break
- 17:50-18:50 **Richard Dawid** (University of Vienna), *Modelling Scientific Confirmation*
- Chairman: Dag Prawitz

### Saturday 13 September 2014

- 09:40-10:40 **Sorin Bangu** (University of Bergen), *Wigner's Puzzle: Unreasonably Effective?*
- 10:40-11:40 **Cesare Cozzo** (Sapienza University of Rome), *Dummett on Inference*
- break
- 12:00-13:00 **Dag Prawitz** (Stockholm University), *Deductive Inference and Models in Sciences*
- Chairman: Carlo Cellucci