Models & Representations in Science

Conference of the Académie Internationale de Philosophie des Sciences (Bruxelles)

Münster, September 25-30
Monday, September 25th, 2023: Arrival of participants Hotel Ibis Budget Muenster City

**Tuesday, September 26th, 2023:**

Venue: Universität Münster Fürstenberghaus; Domplatz 20-22

9.00-9.30 Welcome of Participants

Chair: Hans-Peter Großhans

- **Speakers:** Prof. Michael Quante, Vice-Rector of the University of Münster
  Prof. Jure Zovko, President of AIPS

9.30-10.15 **Johan van Benthem:** “The importance of representation in enabling logical reasoning”

10.15-11.00 **Itala Loffredo d'Ottaviano:** “Partial-structures and partial-truth in science”
11.00-11.15 Coffee Break
11.15-12.00 **Chen Bo:** “Does Logic Represent This World and Our Mind? Yes!”
12.00-12.45 **Hannes Leitgeb:** “On Non-Representational Parts of Models”

13:00-15:30h Lunch Break

15.30-16.15 **Demetris Portides:** “Idealization and Abstraction in Scientific Models”
16.15-17.00 **Michel Ghins:** A defense of the structural view of scientific representation
17.00-17.45 **Jean-Guy Meunier:** Modeling computer assisted conceptual analysis from philosophical texts
17.45-18.00 Coffee Break

18.00-18.45 **Pablo Lorenzano:** “Models and theory construction: structuralist and models in scientific practice programs”
18.45-19.30 **Bernard Feltz:** “Modelising and simulating in biology: a comparative approach”

**Wednesday, September 27th, 2023**

9.00-9.45 **Hans Lenk:** “Representation from technological modelism via perspectivistic pluralism towards”
9.45-10.30 **Jure Zovko/Jörn Witt:** “Diagnosis as an explanatory model of reality: Philosophical-medical approaches.”
10.30-11.15 **Lorenzo Magnani:** Model-based scientific cognition as epistemic warfare
11.15-11.30 Coffee Break
11.30-12.15 **Hans-Jörg Rheinberger:** Modeling in Experimentation
12.15-13.00 **John Symons:** “What is the scientific value of machine learning models?”

13:00-15:30 Lunch Break
15.30-16.15 **Gerhard Schurz:** The Principle of Total Evidence: Justification and Political Significance
16.15-17.00 **Brigitte Falkenburg:** “Mechanistic and Probabilistic Models in Astroparticle Physics”
17.00-17.15 Coffee Break
17.15-18.00 **Jesus Pedro Zamora Bonilla:** “Models and representations in an inferential-deflationary view of scientific knowledge”
18.00-18.45 **Marco Buzzoni:** “Thought experiments and computer simulations: a comparison”
18.45-19.30 **Atocha Llera Aliseda:** „Models of change“

**Thursday, September 28th, 2023**

9.00-9.45 **Alberto Cordero:** “Models and representation in functional realism”
9.45-10.30 **Anjan Chakravartty:** “Models of science education and representations of science”
10.30-11.15 **Martin Carrier:** “Model-building in practice-driven research”
11.15-11.30 Coffee Break
11.30-12.15 **Gregor Schiemann:** “Scientific Worldviews and Models in Hermann von Helmholtz and Werner Heisenberg”
12.15-13.00 **Jan Faye:** “Models or theories: what is the real representation in Science?”
13.00-15.00 Lunch Break

15.00-15.45 **Gino Tarozzi:** “Non-standard realistic models of quantum phenomena and new forms of complementarity”
16.30-17.15 **Hans-Peter Grosshans:** „What do models in theology represent? The example of the trinitarian model of God“
17.30-20.00 General Assembly
20.15 Gala dinner

**Friday, September 29th, 2023**

9.00-9.45 **Harvey Brown:** „Do symmetry principles explain conservation laws in physics? Lessons from the modern (first) Noether theorem“
9.45-10.30 **Dennis Dieks:** “Factivity of Representation in Science”
10.30-11.15 **Otavio Bueno:** “Empiricism and microscopy”
11.15-11.30 Coffee Break
11.30-12.15 **James McAllister:** “Are empirical data representations?”
12.15-13.00 **Reinhard Kahle:** “Hilbert on sciences”
13.00-15:30 Lunch Break

15.30 City tour & visit to the museums in Münster