

## AIPS Conference October 28-30, 2016

International Academy for the Philosophy of the Sciences

### Mechanistic Explanations, Computability and Complex Systems

Brigitte Falkenburg (Dortmund) & Gregor Schiemann (Wuppertal)

#### **Thursday October 27, 2016:**

20:30 *Informal Welcome Meeting: "La Paz", HansasträÙe 30, 44137 Dortmund*

#### **Friday October 28, 2016**

09:30 Opening

Gerhard Heinzmann (Nancy), Brigitte Falkenburg (Dortmund), Gregor Schiemann (Wuppertal)

#### **I Mechanistic Explanation: Conceptions, Objections, and Defence**

10:00 Stathis Psillos (Athens):  
Mechanisms, Then and Now

11:00 *Coffee break*

11:30 Brigitte Falkenburg (Dortmund):  
Mechanistic Explanations: History, Scope, and Limitations

12:30 Dennis Dieks (Utrecht):  
Explanation and Mechanisms in Physics

13:30 *Lunch break*

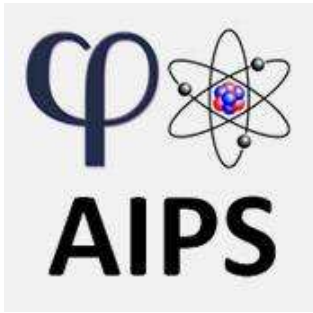
14:30 Marco Buzzoni (Macerata):  
Multilevel Reality, and Mechanistic Explanations

15:30 Itala M. Loffredo D'Ottaviano (São Paulo):  
Autonomous Action in Complex Mechanical Systems: A Real Dilemma?

16:30 *Coffee break*

17:00 Joëlle Proust (Paris):  
Metacognition and the Role of Mechanistic Explanations in the Philosophy of Mind

18:30 *Flamenco: La Martina*  
<http://www.flamencodortmund.de/la-martina/>



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#### **Saturday October 29, 2016**

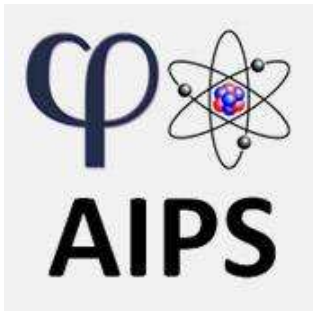
- 09:00 Jan Faye (Copenhagen):  
Causal Mechanism, Complexity, and the Environment
- 10:00 Michel Ghins (Louvain):  
Mechanistic Explanation: An Extension and a Defence

#### **II Explaining Complex Systems: Case Studies from Physics and Biology**

- 11:00 *Coffee break*
- 11:30 Margaret Morrison (Toronto):  
Turbulence and the Problems of Explanation in Multi-Scale Modelling
- 12:30 Michela Massimi (Edinburgh):  
Three Methodological Cheers for Perspectivism in High Energy Physics
- 13:30 *Lunch break*
- 14:30 Ion-Olimpiu Stamatescu (Heidelberg):  
Explanation, the Progress of Physical Theories, and Computer Simulations
- 15:30 Bernard Feltz (Louvain):  
Philosophical Issues of Mathematical Modelling in Life sciences. From Self-Organization to Autonomy
- 16:30 *Coffee break*

#### **III Explanation, Causation, Representation**

- 17:00 Paul Weingartner (Salzburg)  
The Need for Pluralism of Causality
- 18:15 *Assemblée générale*
- 20:00 *Conference Dinner: "La Gazette", An der Palmweide 56, 44227 Dortmund*



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#### **Sunday October 30, 2016**

- 09:00 Jure Zovko (Zagreb):  
Is Inference to the Best Explanation a Myth?
- 10:00 Vincenzo Fano (Urbino):  
Computation and Reality
- 11:00 *Coffee break*
- 11:30 Gino Tarozzi (Urbino):  
The Lack of Causal Explanation in Quantum Mechanics
- 12:30 *End of Conference*