**Description:**

This workshop brings together researchers from fields as diverse as the philosophy of climate science, mathematics, high energy physics, gravitation, and causation. It aims to investigate, among other things, the relation between models in mathematics and physics, the prospects of causal models of physical reality, or the epistemological status of simulation models as used in high energy physics or climate research.

The workshop is a collaboration between the Universities of Düsseldorf and Salzburg, and the interdisciplinary DFG research unit *The Epistemology of the Large Hadron Collider*. For more information, please visit [https://fboge.wordpress.com/upcoming/mpsophia17](https://fboge.wordpress.com/upcoming/mpsophia17) or [https://www.sbg.ac.at/sophia/SOPhiA/2017/languages/en/](https://www.sbg.ac.at/sophia/SOPhiA/2017/languages/en/).

Organization: Florian Boge, DFG research unit/Interdisciplinary Centre for Science and Technology Studies (IZWT) at BU Wuppertal. Contact: fboge@uni-wuppertal.de

**Program:**

09:00–09:15 General Introduction  
*Florian Boge*, BU Wuppertal

09:10–09:15 short break

09:15–09:45 The Neglect of Initial Conditions Dependence and Initial Conditions Uncertainty in Climate Science  
*Charlotte Werndl*, Salzburg University

09:45–09:50 short break

09:50–10:25 From Models to Reality: A Plea for Caution  
*Niels Martens*, RWTH Aachen

10:20–10:25 short break

10:25–10:55 A Defense for Pluralism of Causality in Physical Explanations  
*Paul Weingartner*, Salzburg University

10:50–11:15 coffee break

11:10–11:45 Modelizing Long-Scale Behavior in Galactic and Extra-Galactic Systems – The Parameters of the ΛCDM Model  
*Miguel Carretero*, BU Wuppertal

11:40–11:45 short break

11:45–12:15 A New Proposal how to Handle Counterexamples to Markov Causation à la Cartwright, or: Fixing the Chemical Factory  
*Nina Retzlaff*, HHU Düsseldorf

12:10–12:15 short break

*Laurenz Hudetz*, Salzburg University

12:50–12:55 short break

12:55–13:35 Simulation Models and Uncertain Reasoning  
*Florian Boge*, BU Wuppertal