Synopsis

Idealization is ubiquitous in scientific practice, yet there is little consensus in the extant philosophical literature on some of the most basic questions about idealization, such as: What exactly constitutes idealization? Is idealization compatible with realism? Are idealization and abstraction distinct? Should theorists work to eliminate idealizations as science progresses? Are there rules governing the rational use of idealization, or should a theorist’s intuition alone guide the process? We would like to see more sustained philosophical analysis directed at these and related questions. To help accomplish this, we will assemble a small group of philosophers from diverse backgrounds for in depth discussion about the philosophical questions related to idealization. The workshop will be organized to maximize discussion time and to ensure that novel material about idealization is given maximum time for discussion. We are especially interested to discuss the more epistemological aspects of idealization, with a lesser emphasis on the detailed case studies that have dominated much of the recent literature.

Organizers: Stephan Hartmann (TiLPS), Michael Weisberg (University of Pennsylvania)

Speakers

Robert Batterman (University of Pittsburgh), Anjan Chakravartty (University of Notre Dame), Frank Hindriks (University of Groningen), Paul Humphreys (University of Virginia), Steven O. Kimbrough (University of Pennsylvania), Arnon Levy (Van Leer Institute Israel), Margaret Morrison (University of Toronto), Menno Rol (University of Groningen), Mauricio Suárez (University of Madrid), Michael Weisberg (University of Pennsylvania)
Program

Wednesday 10.10

9.00 - 9.15  Stephan Hartmann and Michael Weisberg: Welcome and Introduction
Part I: Idealizations in Science
9.15 - 9.30  Robert Batterman: Controllable vs. Uncontrollable Idealizations
9.30 - 9.45  Michael Weisberg: Representational Ideals
9.45 - 10.00 Steven Kimbrough: On Stylization, Idealization, and Heuristics
10.00 - 10.15 Menno Rol: Idealization, Abstraction, and Policy Relevance
10.15 - 11.00 Discussion
11:00 - 11:30 Coffee Break Part II: Idealizations and Fictions
11.30 - 11.45 Margaret Morrison: Mathematical Abstraction: Not Just a Convenient Fiction
11.45 - 12.00 Arnon Levy: Idealization as Fiction
12.00 - 12.15 Mauricio Suárez: Idealization, Abstraction, Fiction: Some Epistemological Distinctions
12.15 - 13.00 Discussion
13:00 - 14:00 Lunch
Part III: Idealizations and Beyond
14.00 - 14.15 Anjan Chakravartty: Truth in the Context of Idealization
14.15 - 14.30 Frank Hindriks: Ideal Idealization
14.30 - 14.45 Paul Humphreys: Idealizations versus Abstractions
14.45 - 15.30 Discussion
15.30 - 16.00 Coffee Break
16.00 - 16.20 Theo Kuipers: Sum Up Talk
16.20 - 17.00 Final Discussion

3