



CALL FOR PAPERS

SUPER-PAC

EARLY CAREER WORKSHOP IN PHILOSOPHY
OF ASTROPHYSICS AND COSMOLOGY

10.28.17-10.29.17

Center for Philosophy of Science

Deadline for submission of an abstract (up to 500 words): **June 30, 2017**

Confirmed Keynote Speakers

Wendy Freedman (Department of Astronomy & Astrophysics, University of Chicago)

Michela Massimi (School of Philosophy, Psychology and Language Sciences, University of Edinburgh)

Topics

Philosophy of cosmology is still an emerging field within philosophy of physics and general philosophy of science. Cosmology in itself is a unique field of study: on the one hand, it focuses on objects which we can only explore through observation but not laboratory experiments; on the other hand, it benefits from cutting-edge structure formation simulations and a 'data deluge' from powerful observational surveys such as the Sloan Digital Sky Surveys and the Planck Mission. It is a rapidly evolving field and many open questions remain, e.g., regarding the nature of dark matter and dark energy, reionization and galaxy formation, and the physical mechanism and consequences of cosmological inflation. Researchers are actively engaged in efforts to account for intriguing disagreement between the current standard model of cosmology and latest observations, including the small-scale challenges such as the 'too big to fail' problem and the galactic mass discrepancy-acceleration relation, and also the tension between estimates of the Hubble parameter from different observables.

The overall aim of this workshop is to collectively explore epistemological and methodological issues in philosophy of astrophysics and cosmology with particular attention to the contributions of observational and experimental evidence in these fields. Relevant topics include the validity of simulation assumptions, use of models and theories in data processing, considerations invoked when integrating different theoretical and/or methodological resources in one application, potential strategies for constraining theory, and principled constraints on what we can know. We hope to use this venue to draw researchers in the physical sciences and philosophers together in substantive dialog. Each contributed talk will be paired with a commentator. We will aim to match up philosophers with physicists and vice versa in order to facilitate interdisciplinary interaction and collaboration.

Submission Guidelines

Abstracts should be no longer than 500 words, and should be prepared for anonymous review. Submissions will be handled through EasyChair:

<https://easychair.org/conferences/?conf=superpac2017>

We encourage submissions from members of underrepresented groups. Although researchers of all levels of experience are welcome to submit papers, we particularly encourage participation from early career scholars.

Notifications of acceptance will be distributed by August 4, 2017. If your abstract is accepted, you will be asked to submit further material by **October 6, 2017**, which will be distributed to the commentator assigned to you. Contributing speakers from the physical sciences will be asked to provide a reference to a paper (either published or posted on the arXiv) that is relevant to the talk to be presented at *Super-PAC*. Philosophers will be asked to submit the paper on which their workshop talk will be based.

Organizing Committee

Nora Boyd (HPS, Pittsburgh)

Siska De Baerdemaeker (HPS, Pittsburgh)

Yao-Yuan Mao (Physics and Astronomy, Pittsburgh)

John Norton (HPS, Pittsburgh)

Porter Williams (HPS, Pittsburgh)

Sponsor

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Questions? Please contact Nora (nmb58@pitt.edu) or Siska (sad116@pitt.edu).