

## CFA - Varieties of Mathematical Abstraction

1 - 3 August 2018, University of Vienna

Mathematical abstraction is a general phenomenon, one that comes in several different varieties. Different forms of abstraction contribute to the characterization of mathematical structures and the development of mathematical theories.

Mathematical abstraction also plays an important role in shaping how we think about and understand empirical phenomena. It is a process by which we generalize from the properties and relations of particular objects to the abstract, mathematical structure that those objects exhibit. It is a process that can be iterated to achieve higher levels of abstraction.

The main objective of this conference is to explore the philosophical significance of mathematical abstraction from different perspectives: metaphysically, epistemologically, historically, and practically. Particular attention will be devoted to the role of abstraction in mathematical practice. Specifically, the following research topics will be addressed:

- Abstraction in mathematical practice
- Abstraction in the sciences
- Definition by abstraction
- Fregean abstraction principles
- Historical discussion of any of the above

Confirmed speakers:

Hourya Benis Sinaceur (Université Paris 1 Panthéon-Sorbonne)  
Francesca Boccuni (Vita-Salute San Raffaele University)  
Ansten Klev (Czech Academy of Sciences)  
Elaine Landry (UC Davis)  
Øystein Linnebo (University of Oslo)  
Paolo Mancosu (UC Berkeley)  
Jean-Pierre Marquis (Université de Montréal)  
Marco Panza (Université Paris 1 Panthéon-Sorbonne and Chapman University)  
Erich Reck (UC Riverside)  
John Wigglesworth (University of Vienna)

Call for Abstracts:

We invite the submission of abstracts, suitable for a 40 minute presentation (followed by 20 minutes for questions), on topics related to any aspects of mathematical abstraction. We encourage submissions from early career researchers and PhD students. Please send an abstract of around 500 words by email to [florian.kolowrat@univie.ac.at](mailto:florian.kolowrat@univie.ac.at) in PDF format. Abstracts should be prepared for blind review. The author's name, paper title, institutional affiliation, and contact details should be included in the body of the email.

Dates and Deadlines:

Submission deadline: 30 April 2018  
Notification of acceptance: 15 May 2018  
Conference: 1 - 3 August, 2018

For further details on the conference, please visit: [https://  
structuralism.phl.univie.ac.at/events/](https://structuralism.phl.univie.ac.at/events/)

Organizers:

Georg Schiemer, Francesca Biagioli, John Wigglesworth  
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