

Agenda

Wednesday, June 30, 2021

08:00 AM (PDT)

Opening Address

08:15 AM (PDT) Plenary Session

From Mathematical Content To Symbols - And Back Again

Speaker: Dirk Schlimm (McGill University, Canada)

Chair: Valeria Giardino

09:45 AM (PDT)

Break

10:00 AM (PDT) Parallel Sessions

**Session 1: Deflating Distinctively Mathematical Explanations in Biology:
Mathematics as Enabler of Teleological/Functional Explanations**

Speaker: José Antonio Pérez Escobar (ETH Zurich, Switzerland)

Chair: Laura Crosilla

Session 2: The Evolution of the Group Concept

Speaker: Ellen Lehet (University of Notre Dame, USA)

Chair: Dirk Schlimm

10:40 AM (PDT) Parallel Sessions

**Session 1: Analogies Between "Mathematical Experiments" and Experiments in
the Natural Sciences**

Speaker: Michał Sochański (Adam Mickiewicz University in Poznań, Poland)

Chair: Laura Crosilla

**Session 2: The Shaping of Rigorous Mathematics, a Case Study with Dedekind's
Drafts**

Speaker: Emmylou Haffner (Université Paris-Saclay, France)

Chair: Dirk Schlimm

11:20 AM (PDT) Parallel Sessions

Session 1: The Discrete, the Continuous, and the Approximate Number System

Speaker: Jean-Charles Pelland

Chair: Laura Crosilla

Session 2: On the Mathematical Practice of the Italian School of Algebraic Geometry: the Case-Study of Gino Fano

Speaker: Elena Scalambro (University of Turin, Italy)

Chair: Dirk Schlimm

Thursday, July 1, 2021

08:00 AM (PDT) Plenary Session

Predicativity as Invariance

Speaker: Laura Crosilla (University of Oslo, Norway)

Chair: Silvia De Toffoli

09:30 AM (PDT)

Break

10:00 AM (PDT) Parallel Sessions

Session 1: Definitions and Concepts in Mathematical Practice

Speaker: V.J.W. Coumans (Radboud University, The Netherlands)

Chair: Emmylou Haffner

Session 2: Conceptual Populations and Mathematical Selection: an Evolutionary Framework for Conceptual Change in Mathematics

Speaker: Matteo De Benedetto (Ludwig-Maximilians-Universität, Germany)

Chair: Roi Wagner

10:40 AM (PDT) Parallel Sessions

Session 1: Naturality of Definitions and of Notations **MOVED TO SATURDAY**

Speaker: David Waszek (McGill University, Canada)

Chair: Emmylou Haffner

Session 2: Foundations in Service of Education: Calculus Textbooks in 18th Century Prague CANCELLED

Speaker: Jan Makovský

Chair: Roi Wagner

11:20 AM (PDT) Parallel Sessions

Session 1: Informal Rigour and the Origins of Forcing

Speaker: Walter Dean (University of Warwick, UK)

Chair: Emmylou Haffner

Session 2: Textual Practices of the Formal: the Case of Lambda-Calculus and Combinatory Logic CANCELLED

Speaker: Anna Kiel Steensen (ETH Zurich, Switzerland)

Chair: Roi Wagner

Friday, July 2, 2021

08:00 AM (PDT) Plenary Session

Cultural Impact on the Notion of Incontrovertible Proof in Mathematics

Speaker: Andrew Granville (Universite de Montréal, Canada)

Chair: Paolo Mancosu

09:30 AM (PDT)

Break

10:00 AM (PDT) Parallel Sessions

Session 1: What Speech Act Is Tied to a Contradiction?

Speaker: Ivo Pezlar (Czech Academy of Sciences, Czech Republic)

Chair: David Waszek

Session 2: Philosophy of Mathematical Practice and Social Ontology

Speaker: Paola Cantu (CNRS, Aix-Marseille Université, France)

Chair: José Ferreirós

10:40 AM (PDT) Parallel Sessions

Session 1: The Language of Mathematics According to Ganesalingam and in the Naproche System

Speaker: Peter Koepke (University of Bonn, Germany)

Chair: David Waszek

Session 2: Mathematical Consensus

Speaker: Roy Wagner (ETH Zurich, Switzerland)

Chair: José Ferreirós

11:20 AM (PDT) Parallel Sessions

Session 1: A Framework for Applications as Problem-Solving Processes

Speaker: Davide Rizza (University of East Anglia, UK)

Chair: David Waszek

Session 2: Intellectual Humility in Mathematics

*Speaker: Colin Jakob Rittberg (Vrije Universiteit Amsterdam, The Netherlands & Vrije Universiteit Brussel, Belgium) **CANCELLED***

Chair: José Ferreirós

Saturday, July 3, 2021

08:00 AM (PDT) Plenary Session

Finitism and Hero of Alexandria's Alternative Constructions: A Possible Explanation

Speaker: Orna Harari (Tel Aviv University, Israel)

Chair: Jemma Lorenat

09:30 AM (PDT)

Break

10:00 AM (PDT) Parallel Sessions

Session 1: Common Axioms in Euclid and Aristotle

Speaker: Vincenzo De Risi (Laboratoire SPHère, CNRS, France; and Max Planck Institute for the History of Science, Germany)

Chair: Gisele Secco

Session 2: Naturality of Definitions and of Notations **NEW TIME**

Speaker: David Waszek (McGill University, Canada)

Chair: Andy Arana

10:40 AM (PDT) Parallel Sessions

Session 1: Euclid's Measure of Complexity

Speaker: Benjamin Wilck

Chair: Gisele Secco

Session 2: Mathematical Practice and Analytic Epistemology

Speaker: Silvia De Toffoli (Princeton University, USA)

Chair: Andy Arana

11:20 AM (PDT) Parallel Sessions

Session 1: A Formal Analysis of Mathematical Explanations

Speaker: Francesco A. Genco and Francesca Poggiolesi (CNRS, IHPST, Université Paris 1 Panthéon-Sorbonne, France)

Chair: Gisele Secco

Session 2: Purity of Methods and Mathematical Practice. A Discussion of the Abstract Approach of Detlefsen, Arana and Mancosu

Speaker: Guillermo Nigro (UFBA, Brazil & UdelaR, Uruguay)

Chair: Andy Arana

Committees

Scientific Committee:

Carmen Martinez-Adame – Chair (UNAM, Mexico)

Valeria Giardino (CNRS, France)

Jemma Lorenat (Pitzer College, USA)

Marco Panza (CNRS, France & Chapman University, USA)

Gisele Secco (Universidade Federal de Santa Maria, Brazil)

Organizing Committee:

Jessica Carter (Aarhus University, Denmark)

Silvia De Toffoli (Princeton University, USA)

Valeria Giardino (CNRS, France)

Carmen Martínez-Adame (UNAM, Mexico)

Marco Panza (CNRS, France & Chapman University, USA)