

Measurement at the Crossroads 2020

Measuring and Modeling

Università Cattolica del Sacro Cuore
Milano, Italy, 29 June – 1 July 2020

Measurement at the Crossroads 2020 - Measuring and modeling is an interdisciplinary conference that explores the philosophy and history of measurement. It aims at consolidating and developing the study of these topics, following the conferences in Bielefeld (2013), Cambridge (2015), and Paris (2018). It will bring together philosophers, historians, sociologists, and metrologists to address questions related to measurement across disciplines ranging from the natural sciences to the life and human sciences. It will be held at the Catholic University of Milan, Italy, 29 June - 1 July 2020.

Call for abstracts

Measurement at the Crossroads 2020 is an interdisciplinary conference that explores the philosophy and history of measurement. It aims at consolidating and developing the study of these topics, following the conferences in Bielefeld (2013), Cambridge (2015), and Paris (2018).

The conference intends to promote the reflection on the foundations of measurement across the sciences from philosophical, historical and sociological points of view. In particular, it will aim to gather scholars from different disciplines to study within diverse perspectives the role of modeling in measurement, the use of measurement in modeling, and the way of demarcating the scope of these activities. In fact, measuring and modeling are fundamental activities for understanding both natural and human domains: through measurements we aim at acquiring objective and intersubjective information about the world; through models we are able to understand complex systems and to predict their dynamics. Although crucially different as activities, measuring and modeling are profoundly intertwined. On the one hand, models are essential in order to select what is to be measured, to provide a sound interpretation of measurement results, and to assess their dependability. On the other hand, measurements are indispensable for determining the quality of models and their ability to capture their intended targets. In the last decades, a growing interest on the connections between measuring and modeling has arisen, from a better comprehension of measurement processes and how model simulations can be used to integrate measurement results, to the idea that the distinction between measurements and simulations is to be thought anew.

Topics

The range of topics of interest includes but is not limited to:

1. Models in measurement
 - The role of models in measurement
 - The role of models in justifying measurement results
 - Models, intersubjectivity, objectivity, validation
 - Models of measurement from a historical point of view
2. Models of measurement
 - The general structure of the measurement process
 - The structure of measurement in social and human sciences
 - Transduction and calibration in measurement
 - History of the conception of the structure of measurement
3. Measurement and simulation
 - Connections between measuring and simulating
 - Can simulation substitute measurement?
4. Measurement and Data Science
 - Measurement and data quality
 - Measurement and data analysis
 - Measurement and big data

Important dates

Deadline for submission: **31 January 2020**

Notification of acceptance: **15 April 2020**

Submission guidelines

We invite submissions for **20 / 30 minute** presentations, with 10 additional minutes for discussion.

Please send a 1000-word abstract in PDF prepared for blind review.

All abstracts should be submitted electronically using the EasyChair submission page [here](#).

Conference website

Please refer to the conference website, <https://convegni.unicatt.it/mac-home>, for further information, about registration, accommodation, etc.

Invited speakers

[Anna Alexandrova](#) (King's College, Cambridge, UK)

[Denny Borsboom](#) (Universiteit van Amsterdam, Amsterdam)

[Omar Nasim](#) (University of Regensburg, Regensburg)

Programme Committee

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- Oliver Schlaudt (University of Heidelberg, Germany)
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- Eran Tal (McGill University, Canada)
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Organizing committee

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- Oliver Schlaudt (University of Heidelberg, Germany)
- Eran Tal (McGill University, Canada)