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In collaboration with

NQSTI, National Quantum  
Science and Technology Institute

MUR PRIN PNRR 2022 "UEFA"

MUR PRIN 2022 - Hybrid Algorithms  
for Quantum Simulators

Center for NeuroScience,  
University of Camerino, Italy

Siena Artificial Intelligence Lab  
(SAILab), Italy

Powerset - Physical health  
data integration

Under the patronage of



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Machine Learning Methods for  
Complex and Quantum Systems  
Camerino, Italy

**June 4-6, 2025**

Polo informatico B - via Madonna delle Carceri 7

The Conference will be opened by **Alfio Quarteroni**

Professor Emeritus - Politecnico di Milano, Italy and EPFL - École Polytechnique Fédérale de Lausanne, Switzerland

#### Invited Speakers

**Adriano Barra**, "Sapienza" University of Rome, Italy  
**Rita Bissoonauth**, UNESCO Liaison Office of the African Union, Addis Ababa, Ethiopia  
**Emanuele Costa**, University of Barcelona, Spain  
**Andrea Della Valle**, University of Camerino, Italy  
**Giuseppe A. Falci**, University of Catania and INFN - Catania section, Italy  
**Flavio Gerosa**, University of Camerino, Italy  
**Christopher Gies**, University of Oldenburg, Germany  
**Marco Gori**, Siena Artificial Intelligence Lab, University of Siena, Italy  
**Florent Krzakala**, EPFL - École Polytechnique Fédérale de Lausanne, Switzerland  
**Jan A. Krzywda**, Leiden University, the Netherlands  
**Alexander Kordyuk**, Kyiv Academic University, Ukraine and IFW-Dresden, Germany  
**Gianluca Lagnese**, Jožef Stefan Institute, Ljubljana, Slovenia  
**Alessandro Lovato**, Argonne National Laboratory, USA  
**Estelle Maeva Inack**, Perimeter Institute for Theoretical Physics, Waterloo, Canada  
**Nicola Lo Gullo**, University of Calabria, Italy  
**Marica Magagnini**, University of Camerino, Italy  
**Stefano Melacci**, Siena Artificial Intelligence Lab, University of Siena, Italy  
**Pere Mujal**, ICFO - The Institute of Photonic Sciences, Spain  
**Samuel Partey**, UNESCO Regional Bureau for Science and Culture in Europe, Venice, Italy  
**Marcin Płodzien**, ICFO - The Institute of Photonic Sciences, Spain  
**Arnau Rios**, University of Barcelona, Spain  
**Grant Rotskoff**, Stanford University, USA  
**Haichen Wang**, Ruhr University Bochum, Germany  
**Francesco Zamponi**, "Sapienza" University of Rome, Italy  
**Zoltán Zimborás**, Algorithmiq Ltd, Finland and HUN-REN Wigner Research Centre for Physics, Budapest, Hungary

#### Main Topics

Introductory perspectives: Machine Learning and the Scientific Method.  
 Innovative Machine Learning Methods.  
 Machine Learning for Quantum Matter.  
 Machine Learning and Quantum Computing; Quantum Machine Learning.  
 Machine Learning for Complex Systems.  
 Enterprise applications of Machine Learning for facing complexity.  
 Artificial intelligence systems for learning and teaching: applications to university scientific studies.

#### Scientific and Organizing Committee

**Andrea Perali** and **Sebastiano Pilati**, CQM group, and **Andrea Polini**, University of Camerino, Italy  
**Federico Ricci Tersenghi**, "Sapienza" University of Rome, Italy  
**Bruno Juliá Diaz**, ManboQu group, University of Barcelona, Spain

#### Conference steering Committee

**Michele Loreti** and **Carlo Lucheroni**, University of Camerino, Italy  
**Giulio Biroli**, École Normale Supérieure - PSL, Paris, France  
**Morten Hjorth-Jensen**, University of Oslo, Norway  
**Giovanni Volpe**, Göteborg University, Sweden

#### Local Organizing Committee

**Luca Brodoloni**, **Simone Cantori** and **Andrea Della Valle**, University of Camerino, Italy



<http://www.multisuper.org/machine-learning-2025>