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In collaboration with

NQSTI, National Quantum
Science and Technology Institute

MUR PRIN PNRR 2022 "UEFA"

Center for NeuroScience,
University of Camerino, Italy

Siena Artificial Intelligence Lab
(SAILab), Italy

Powerset - Physical health
data integration

Under the patronage of



ML2025
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
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>