



Machine learning for lattice field theory and beyond

Trento, 26 - 30 June 2023

ORGANIZERS

Gert Aarts (Swansea University, UK and ECT*, I)
Dimitrios Bachtis (Ecole Normale Supérieure, F)
Daniel Hackett (Massachusetts Institute of Technology, US)
Biagio Lucini (Swansea University, UK)
Phiala Shanahan (Massachusetts Institute of Technology, US)

ABSTRACT - MAIN TOPICS

This workshop aims to provide a forum for the community working on this topic to cross-pollinate methods, generate ideas for new applications, and assess the state of the field to guide further exploration.

Highlighted topics include generative models for configuration generation, ML- accelerated algorithms, ML approaches to inverse problems, physics from novel machine-learned observables, and new calculational techniques enabled by ML methods.

KEY SPEAKERS

Evan Berkowitz (FZ Juelich, D) Aurélien Decelle (Complutense University of Madrid, E) Mathis Gerdes (University of Amsterdam, NL) Gurtej Kanwar (University of Bern, CH) Javad Komijani (ETH Zurich, CH) Anindita Maiti (University of Harvard, US) Nobuyuki Matsumoto (RIKEN, JP) Remi Monasson (ENS, Paris, F) Alessandro **Nada** (University of Turin, I) Kim Nicoli (TU Berlin, D) Misaki Ozawa (Université Grenoble Alpes, CH) Alexander Rothkopf (University of Stavanger, NO) Pietro Rotondo (University of Parma, I) Daniel Schuh (TU Vienna, A) Daniel Spitz (University of Heidelberg, D) Julian Urban (MIT, US) Roberto Verdel (ICTP, Trieste, I) Neill Warrington (University of Washington, US) Tilo Wettig (University of Regensburg, D) Yukari Yamauchi (University of Washington, US) Kai Zhou (FIAS, Frankfurt, I)

Director of ECT*: Professor Gert Aarts

The ECT* is part of the Fondazione Bruno Kessler. The Centre is funded by the Autonomous Province of Trento, funding agencies of EU Member and Associated states, and by INFN-TIFPA and has the support of the Department of Physics of the University of Trento.

For the organization places central: ECT* Secretarist. Villa Temberia. Stredg della Teberalla 286 L 38123 Villa Temperia. (Trento). Halv L Telvi L

For the organization please contact: ECT* Secretariat - Villa Tambosi - Strada delle Tabarelle 286 | 38123 Villazzano (Trento) - Italy | Tel.:(+39-0461) 314723, E-mail: staff@ectstar.eu or visit http://www.ectstar.eu



