# WINTER PHD SCHOOL ON
# *STATISTICAL FIELD THEORIES*

*The Galileo Galilei Institute for Theoretical Physics*
*Arcetri, Firenze*

## February 5-16, 2024

This school is meant for PhD students with interest in low-dimensional quantum field theory, conformal field theory and integrable models, and their applications to statistical mechanics and condensed matter systems. Five courses will be delivered which address both introductory topics and recent developments in this field.

Lectures will be scheduled each morning, for a total amount of about forty hours, over two weeks. Presentations will be given on the blackboard. The afternoon will be devoted to study and discussion. A desk and standard research facilities will be provided to all participants.

The school can admit up to forty participants. Help for finding accommodation in agreed hotels can be provided upon request, as well as financial support for this cost.

The courses can be included in the PhD curricula of Italian Universities and abroad. If necessary, exams for each course can be taken. Lectures will be recorded and posted on the GGI YouTube channel. Note that the school will be held in presence only.

## Lecturers

**Dmitry A. Abanin** *(Princeton University):* Non-equilibrium quantum matter through the prism of quantum entanglement

**Andrea Cappelli** *(INFN, Florence):* Quantum field theory anomalies in condensed matter physics

**Cristiane de Morais Smith** *(Utrecht University):* Dissipation in quantum systems

**Gregory Schehr** *(LPTHE, Sorbonne Université, Paris):* Random matrices and statistical physics

**Peter Zoller** *(ITP and IQOQI, Innsbruck):* Quantum simulation with quantum optical systems

**Organizers**: *P.Calabrese, J. Dubail, F.Essler, C.Morais-Smith, A. Trombettoni, J. Viti*
**Advisory Board**: *D.Bernard, A. Cappelli, F.Colomo, G. Mussardo*

**Deadline for application**: November 15, 2023

**Webpage:** https://www.ggi.infn.it/showevent.pl?id=478