

## WINTER PHD SCHOOL ON STATISTICAL FIELD THEORIES

The Galileo Galilei Institute for Theoretical Physics
Arcetri, Firenze

February 7-18, 2022

The school will offer postgraduate lectures on topics of low-dimensional quantum field theory, conformal field theory and integrable systems, together with their applications to statistical mechanics and condensed matter systems. Introductory subjects as well as recent advances will be covered.

This year the school can only admit 25 participants in-person. Accommodation in single rooms will be provided for a total price of about 500 euros. Financial support to accommodation expenses may be provided, upon request, to about 20 participants. The lectures will be broadcast for allowing further students to follow on-line: they should also register, specifying "on-line participation" in their application.

The courses can be included in the PhD curricula of Italian Universities and abroad. If necessary, a final exam on the courses can be taken.

## **Lecturers**

Mari Carmen Banuls (Max Planck Institute of Quantum Optics, Garching): "Introduction to tensor networks"

Nigel Cooper (University of Cambridge): "Quantum dynamics and topology"

Valentina Ros (Université de Paris-Saclay): "Localization in many-body quantum systems"

Subir Sachdev (Harvard University): "The quantum phases of matter"

**Kareljan Schoutens** (*University of Amsterdam*): "Many-body physics and quantum computation"

## 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 30, 2021

Webpage: https://www.ggi.infn.it/showevent.pl?id=417