GGI SCHOOL

WINTER PHD SCHOOL ON

STATISTICAL FIELD THEORIES

The Galileo Galilei Institute for Theoretical Physics
Arcetri, Firenze

February 6-17, 2023

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 recorder and posted on the GGI YouTube channel. Note, however, that the school will be held in presence only, unless new Covid restrictions will be imposed.

Lecturers

Barry Bradlyn *(University of Illinois Urbana-Champaign):* Introduction to Topological Quantum Chemistry

Anna Minguzzi *(LPMMC, CNRS and Universite Grenoble Alpes, Grenoble):* Strongly interacting one-dimensional systems under confinement: exact solutions

Lorenzo Piroli *(IPM, ENS, Paris):* Quantum-circuit models for many-body physics out of equilibrium

Balt van Rees *(CPHT, CNRS and Ecole Polytechnique, Saclay):* S-matrices and the bootstrap

Francesco Zamponi *(LP, CNRS and ENS, Paris):* Introduction to the dynamics of disordered 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, 2022

Webpage: https://www.ggi.infn.it/showevent.pl?id=443