



7-24 JANUARY
2020

GGI LECTURES ON THE THEORY OF FUNDAMENTAL INTERACTIONS

Galileo Galilei Institute for Theoretical Physics - Firenze

Organizers

Brando BELLAZZINI
(IPHT CEA-Saclay)

Marco CIRELLI
(LPTHE CNRS Jussieu)

Stefania DE CURTIS
(Florence U. & INFN)

Fabio MALTONI
(Bologna U. & Louvain U.)

Giuliano PANICO
(Florence U. & INFN)

Michele REDI
(Florence U. & INFN)

Riccardo TORRE
(INFN, Genova & CERN)

Lecturers and Topics

Nima ARKANI-HAMED (IAS Princeton)
Positive Geometry of the Real World

Daniel BAUMANN (Amsterdam U.)
The Cosmological Bootstrap

Luigi DEL DEBBIO (Edinburgh U.)
QFTs on the lattice

Silvia PASCOLI (Durham U.)
Neutrino Physics

Rafael PORTO (DESY Hamburg)
Gravitational waves: A modern approach

Jesse THALER (MIT)
QCD and Collider Physics

The lectures are primarily addressed to Ph.D. students in High Energy Particle and Astroparticle Physics. Participation of post-docs is also encouraged. The aim of the school is to give a pedagogical introduction to the basic concepts and tools needed for research, covering the foundations of the subject at a deep and advanced level. Lectures will be given at the blackboard.