

G G I S C H O O L



12-30 JANUARY
2026

GGI LECTURES ON THE THEORY OF FUNDAMENTAL INTERACTIONS

Galileo Galilei Institute for Theoretical Physics - Firenze

Organizers

ANGELO ESPOSITO
(Roma Sapienza U. & INFN)
ROBERTO FRANCESCHINI
(Roma Tre U. & INFN)
DIEGO REDIGOLO
(INFN Firenze)
GIULIA RICCIARDI
(Napoli Federico II U. & INFN)
FILIPPO SALA
(Bologna U. & INFN)
ANDREA TESI
(INFN Firenze)

Lecturers and Topics

DIEGO BLAS (IFAE Barcelona)
Quantum sensing for fundamental physics
NATHANIEL CRAIG (UC Santa Barbara)
The generalized 't Hooft paradigm
JOAN ELIAS MIRÓ (ICTP)
S-matrix bootstrap
SHIRLEY LI (UC Irvine)
Neutrinos in the 20's
GERALDINE SERVANT (DESY)
BSM in the Early Universe
JESSE THALER (MIT)
Machine Learning for fundamental physics

The lectures are primarily addressed to Ph.D. students in High Energy Particle and Astroparticle Physics. 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.



deadline for applications: 7 November 2025
[link website](#)