

# Colloqui della Classe di Scienze

Anno Accademico 2024/2025

**Sala Stemmi**

Palazzo della Carovana  
Scuola Normale Superiore  
Piazza dei Cavalieri, 7 - PISA

**9 APRIL 2025**

h 3.00 p.m.

**STEFANO FORTE**

Università di Milano and INFN

*Artificial intelligence in fundamental physics:  
from modeling to understanding.*

**ABSTRACT:**

Artificial intelligence tools are becoming ubiquitous in everyday life as a tool for facilitating and speeding up tasks, such as accessing information. In fundamental physics they are instead being used as tools for discovery. Specifically drawing from examples in high-energy physics, I show that AI and machine learning are making possible the access to otherwise hidden information on physical systems, through modeling, performing inference, generalizing, and finding connections that would otherwise be very difficult or impossible to achieve.

