

# ILLUMINATING IDEAS

A WORKSHOP FOR THE INTERNATIONAL DAY OF LIGHT 2025



MAY 16<sup>th</sup> 2025

h 09:00 Aula Magna

Physics and Astronomy Dept. - UNICT  
CATANIA, SICILY

## Workshop Programme

09:00 - 09:15 Introduction

09:15 - **Sylvain Gigan** (Sorbonne Université, Laboratoire Kastler-Brossel, Département de physique de l'École Normale Supérieure, CNRS – ENS – Collège de France, Paris, France)  
*Title: Sending light in opaque materials: Imaging and Beyond*

10:15 - **Maria Caterina Giordano** (Department of Physics, University of Genoa, Italy)  
*Title: Steering light within 2D TMD semiconductor layers*

10:35 - **Santi Concetto Pavone** (Department of Electrical, Electronic and Computer Engineering (DIEEI), University of Catania, Italy)  
*Title: Limited-diffractive Bessel beams in the Fresnel region for applications at microwaves and mm-waves*

11:00 - 11:30 Coffee Break

11:30 - **Emanuele Leonora** (INFN – National Institute for Nuclear Physics, Catania Section, Italy)  
*Title: The KM3NeT project: a Cherenkov light detector in the Mediterranean Sea*

11:45 - **Antonio Alessio Leonardi** (Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy)  
*Title: Label-free Biosensors Based on Light-Emitting Silicon Nanowires*

12:05 - **Alessandro Lanzafame** (Department of Physics and Astronomy "E. Majorana", University of Catania, Italy, INAF – Osservatorio Astrofisico di Catania, Italy)  
*Title: The electromagnetic spectrum of young stars in the Galaxy*

12:30 - **Luigi Giannelli** (Department of Physics and Astronomy "E. Majorana", University of Catania, Italy, INFN – National Institute for Nuclear Physics, Catania Section, Italy)  
*Title: Storage and generation of single photons with intra-cavity atomic systems*

13:00 Closure