

ICTP, Trieste, Italy

May 9-12, 2023



## International School on Quantum Science and Technology

The goal of the **Quantum-NEST** School (Quantum Network for Education and Scientific Training) is to provide an overview of the evolution of the field, and on its most exciting developments. It is primarily aimed at Master and Ph.D. students

### Confirmed invited Lecturers :

J.-F. Roch, ENS Paris-Saclay, France  
L. Sanchez-Palencia, E. Polytechnique, France  
F. Sciarrino, U. Roma La Sapienza, Italy  
J. Lopes dos Santos, U. Porto, Portugal  
L. Goubin, UVSQ Versailles, France  
S. Kazamias, U. Paris-Saclay, France  
M. Palma, U. Palermo, Italy  
F. Scazza, U. Trieste, Italy  
R. Trotta, U. Roma La Sapienza, Italy

### Topics will include:

Quantum sensors and open systems,  
quantum optics and communication,  
quantum many-body physics and  
materials, cold atoms, quantum and  
post-quantum cryptography.

### Organizing committee:

Rosario Fazio, ICTP – Trieste, Italy  
Marino Marsi, U. Paris-Saclay, France  
Giuseppe Santoro, SISSA, Trieste, Italy

### Contact:


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## International School on Quantum Science and Technology program

	Tuesday May 9	Wednesday May 10	Thursday May 11	Friday May 12
09:00	R. Trotta <i>Artificial atoms for quantum communication</i>	M. Palma <i>Open quantum systems</i>	J.-F. Roch <i>Quantum sensors</i>	L. Goubin <i>Quantum cryptography</i>
10:00	L. Sanchez-Palencia <i>Quantum many body physics</i>	L. Sanchez-Palencia <i>Quantum many body physics</i>	L. Sanchez-Palencia <i>Quantum many body physics</i>	F. Sciarrino <i>Quantum advantage via photonic platforms</i>
11:00	<i>coffee break</i>			
11:20	M. Palma <i>Open quantum systems</i>	J. Lopes dos Santos <i>Quantum effects in bilayer graphene</i>	L. Goubin <i>Quantum cryptography</i>	J.-F. Roch <i>Quantum sensors</i>
12:20	<i>lunch</i>			
14:00	M. Palma <i>Open quantum systems</i>	F. Scazza <i>Ultracold atoms</i>	J.-F. Roch <i>Quantum sensors</i>	
15:00	S. Kazamias <i>Entangled HHG photons</i>	<i>visit SISSA, ICTP, AREA Science Park</i>	F. Scazza <i>Ultracold atoms</i>	
16:00	<i>coffee break</i>		<i>coffee break</i>	
16:20	F. Scazza <i>Ultracold atoms</i>		L. Goubin <i>Quantum cryptography</i>	