RARE EARTHS FOR QUANTUM SCIENCE MINI-SCHOOL

Program - April 2026

	Monday, 13	Tuesday, 14	Wednesday, 15	Thursday, 16
9:00 a.m		Crystals and materials ***Diana Serrano***	Paramagnetic defects ***James O'Sullivan***	Optical-microwave transduction ***Thierry Chanelière***
10:00 a.m		*Coffee break*	*Coffee break*	*Coffee break*
11:00 a.m		Single REI and applications ***Andreas Walter***	Memories ***Mikael Afzelius***	N°12 N°13
12:00 p.m		N°1 N°2	N°5 N°6	N°14 Lunch
1:00 p.m		Lunch	Lunch	*Bus*
2:00 p.m		Mountain activity with instructors	Free time	
3:00 p.m			N°7	
4:00 p.m			N°8	*Bus*
5:00 p.m	*Bus*	*Coffee break*	N°9 *Coffee break*	
6:00 p.m		Classical processing ***Anne Louchet-Chauvet***	N°10 N°11	
7:00 p.m	*Bus*	N°3 N°4	Posters session	
8:00 p.m	Dinner	Dinner	Gala dinner	
9:00 p.m		Posters session		

Tutorial | Group talk

		Title	Laboratory
N°1	Johan Renders	Quantum processor node using rare-earth ions and its application toward entanglement distribution.	Lund University
N°2	Aaron Schäpers Benedikt Braumandl	Erbium dopant for quantum network.	Technical University of Munich, *Quantum Networks Group*
N°3	Flora Segur	Rare earths for real time spectral analyzers.	Langevin Insitute, Thales Research& Technology
N°4	Abhay Vasudevan Preethika Thiraviam	Towards quantum computing and quantum networking with novel europium-based materials.	Karlsruhe Institute of Technology
N°5	Elisa Foery Francesco De Amicis	Eu quantum memory and a SPDC source for that memory.	Geneva University, *Quantum Repeaters & Memories Group*
N°6	Tristan Lorriaux	Adressing a spin-ensemble for storing microwave quantum states.	Physics Laboratory of the École Normale Supérieure (ENS) of Lyon
N°7	Alexandre Kings Julien Bertrand	Exploring unusual transitions in Tm:YALO for quantum communication.	Geneva University, *Quantum Networks Group*
N°8	Tobias Feuerbach Georgii Grechko	Toward an Efficient Quantum-Photonic Interface for Rare-Earth Ions on a Hybrid LNOI-TiO2 Platform.	Stuttgart University
N°9	Lucas Araujo	Towards Novel Nanophotonic Interfaces with Rare-Earth Ion-Doped Nanomaterials.	Chemistry Research Institute of Paris (IRCP), Chimie ParisTech
N°10	Thibault Desrousseaux	Approximate Quantum Error Correction for a Photon Memory.	*Quantum Group* at IPhT, CEA
N°11	Michael Hernandez	Towards Integrated Quantum Memories: Si3N4 Waveguides on Rare-Earth-Ion-Doped Crystals.	University of Southampton
N°12	Shijun Zhang	First step of wave guide preparation in YSO crystal.	Néel Institute, *Nanophysics and Semiconductors Group*
N°13	Mickael Chan	Crystalline waveguides for efficient integrated quantum memories.	Thales Research & Technology
N°14	Frederik Brooke		Heriot-Watt University, *Quantum Photonics Laboratory*

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