



# RESEARCH DAY

## Scientific program – 2024

**9h30**

**Techniques and Applications of attosecond pulses**

Pierre Agostini

**10h**

**Attosecond light pulses from laser driven plasma mirrors towards extreme intensities**

Rodrigo Lopez-Martens, LOA

**10h15**

**Exploring new uses for fiber optic cables**

Elie Awwad, LTCI

**10h30**

**Tutorial : Quantum Cascade Lasers: 30 Years of Innovation**

Frédéric Grillot, LTCI

**11h30**

**Laser filamentation and its applications**

Aurélien Houard LOA,  
Arnaud Couairon, CPHT

**11h45**

**Light to probe plasma interactions with liquids and materials**

David Pai, LPP

**12h**

**Using multiperiod pollution standards to infer the cost of environmental regulation**

Florian Grosset, CREST

**12h15**

**Programmable optical pulse train based on Talbot effect**

Youcef Driouche, SAMOVAR

**14h**

**Different approaches to photovoltaic conversion**

Jordi Badosa, Nathanaelle Schneider,  
Daniel Suchet, Aubin Parmentier, IPVF, E4C

**14h30**

**Planetology in the laboratory with high-power lasers**

Alexandra Ravasio, LULI

**14h45**

**Multiphoton microscopy : a window on life**

Emmanuel Beaufrepaire, LOB

**15h**

**Advanced optical microscopy of cultural artifacts**

Gaël Latour, LOB

**16h15**

**Controlling topological phases of matter with light**

Olesia Dmytruk, CPHT

**16h30**

**Filming the dynamics of photo-actives proteins**

Michel Sliwa, LOB

**16h45**

**Laser-plasma acceleration and its applications**

Jérôme FAURE, LOA

**17h**

**Quantum technologies**

Laurent Sanchez Palencia, CPHT  
Nicolas Fabre, LTCI