

PHOTONICS DAY

13 DECEMBER 2021



**Amphi J. J. Gagnepain
FEMTO-ST Institute**

Registration online



PROGRAM

- 9.30 Welcome remarks
- 9.45 **Plasmonics Purcell factor : reconciling classical and cQED approaches and downscaling quantum optics to the nanoscale**
Pr. Gerard Colas-Des-Francs (Laboratoire ICB, Dijon, France)
- 10.15 **High peak power pulse generation at exotic wavelengths using nonlinear effects in optical fiber**
Dr. Hugo Delahaye (FEMTO-ST Institute, Besançon, France)
- 10.30 **Europium doped nanorods as probes of electric and magnetic optical environments**
M. Reinaldo Chacon (Laboratoire ICB, Dijon, France)
- 10.45 Coffee break
- 11.00 **Silicon Surface amorphization and re-crystallization via single femtosecond laser pulses**
Dr. Camilo Florian Baron (Princeton University, Princeton, USA)
- 11.30 **Laser writing of color centers and optofluidics in synthetic diamond for quantum technologies.**
Dr. Ottavia Jedrkiewicz (CNR, Como, Italy)
- 12.00 **Extended auto-focusing capabilities in digital holographic microscopy with transformer neural networks**
Dr. Louis Andreoli (FEMTO-ST Institute, Besançon, France)
- 12.15 Lunch break
- 14.00 **Reaching extreme states of matter using femtosecond pulses - Challenges and Applications**
Dr. François Courvoisier (FEMTO-ST Institute, Besançon, France)
- 14.30 **Surviving in Science - Building and Sustaining a Career in Photonics**
Pr. John M. Dudley (FEMTO-ST Institute, Besançon, France)
- 15.00 Coffee break
- 15.15 **Optical and mechanical system design at Fraunhofer IOF in Jena (Germany)**
Dr. Christian Vetter (Fraunhofer institute, Jena, Germany)
- 15.45 **Hong-Ou-Mandel interference in quantum images**
Pr. Fabrice Devaux (FEMTO-ST Institute, Besançon, France)
- 16.15 **Optical solitons analysis in supercontinuum generation through deep learning techniques**
M. Mehdi Mabed (FEMTO-ST Institute, Besançon, France)
- 16.30 Closing remarks