

Conference Program — GDR CNRS ELIOS (FEMTO-ST, 15 av. des Montboucons, Besançon)

Registration & Welcome — Tue 14.10.2025, 9:15, FEMTO-ST	
10:00	Birgit Stiller (Max Planck Erlangen & Leibniz Univ. Hannover, Germany) <i>Waveguide optoacoustics for quantum technologies (Invited)</i>
10:30	Simon Colombel (FEMTO-ST, Besançon) , Brillouin scattering in nanofiber nitrogen gas cell
10:45	Sharon Sha (ENSSAT, Lannion) , Narrow linewidth Brillouin fiber laser in the visible
<i>Coffee break 11h00-11h30 (Poster session)</i>	
11:30	Stefano Negrini (PHLAM, Lille) Phase and Amplitude Encoding for all Optical Kernel Methods with a Photonic Lantern
11:45	Lucas Zanaglia (INPHYNI, Nice) Spatiotemporal thermalization and adiabatic cooling of guided light waves
12:00	Arnaud Rogemont (ICB, Dijon) Generalized Heterodyne Interferometry in Kerr Materials
12:15	Andrei Ermolaev (FEMTO-ST, Besançon) The limits of an optical fiber-based extreme learning machine
<i>Lunch 12h30-14h00 (Poster session)</i>	
14:00	Christophe Moser (EPFL, Suisse) <i>Nonlinear Effects in Optical Fibers and Waveguides for AI Applications (Invited)</i>
14:30	Mario Ferraro (ICB, Dijon) Recent progress in the thermodynamic approach to multimode nonlinear fiber optics
14:45	Romain Morel (FEMTO-ST, Besançon) A novel all-normal dispersion photonic crystal fiber design for low-noise coherent SC generation
15:00	Eloise Papka (ICB, Dijon) High-gain visible frequency conversion via intermodal four-wave mixing in a few-mode GRIN fiber
<i>15h15-15h45 EXAIL Ph.D Award Ceremony</i>	
<i>Coffe Break 15h45-16h15 (Poster session)</i>	
16:15	Doan Le Van (ICB, Dijon) Platicon microcomb in dual pumped spiral resonator
16:30	Debanuj Chatterjee (PHLAM, Lille) High-Frequency Acoustic Wave Sensing with Electro-Optic Dual Frequency Comb
16:45	Thomas Bunel (ULB, Bruxelles) Dual-comb generation in tricore fiber Fabry-Perot resonators
17:00	Arnaud Mussot (PHLAM, Lille) All PM fiber electro optic modulated frequency combs with 27 fs pulse at 10 GHz
17:15	Sanvert Yohann, (ICB, Dijon) Symmetry broken localized structures in a coherently-driven Fabry-Perot resonator
17:30	Charnay Elias (PHLAM, Lille) Ballistic correlations emerging from dynamics of soliton gases in a recirculating fibre loop
<i>Session End & Free time 17h45</i>	
<i>Gala Diner 19h30 (city center)</i>	

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Registration & Welcome — Wed 15.10.2025, 9:00, FEMTO-ST	
9:30	Mostafa Mohamed (ICB, Dijon) Energy-managed soliton fiber laser: from concept to applications
9:45	Saad Hatim (CORIA, Rouen) Mid-infrared fiber laser sources based on Erbium-doped fluoride fibers for emissions around 3.5 μm
10:00	Arnaud Viry (CIMAP, Caen) Red picosecond fiber optical parametric oscillator pumped at 914 nm
10:15	Sacha Petit (ISL, Saint-Louis) 2 micrometer pulsed ring fiber laser mode-locked by nonlinear polarization evolution
<i>Coffee Break 10h30-11h00 (Poster Session)</i>	
11:00	Theo Torres (ICB, Dijon) Spontaneous repolarization via light thermalization in a birefringent optical fiber
11:15	Nathanaell Benon (FEMTO-ST, Besançon) Second harmonic generation in thin film lithium niobate waveguides
11:30	Adam Bieganski (INL, Lyon) Towards tunable mid-IR nonlinear sources on SiGe-on-Si integrated platform using phase-change material
11:45	Charbel Khallouf (FEMTO-ST, Besançon) Temporal reflection and supercontinuum enhancement via dual pumping in photonic integrated circuits
12:00	Alois Baudry (Institut d'Optique, Paris-Saclay) Deposition of gold nanoparticles on the surface of silica optical microfibers for pollutant sensors
<i>Lunch 12h15-14h00 (Poster Session)</i>	
14:00	Laurent Vivien (C2N, Univ. Paris-Saclay) <i>Towards fully integrated supercontinuum sources for the silicon photonics platform (Invited)</i>
14:30	Adrian Bartolo (Institut d'Optique, Univ. Paris-Saclay) Nonlinear characterizations of SiN hybrid waveguides
14:45	Théo Dutron (FEMTO-ST, Besançon) Reflection Bragg mirrors to form resonant cavities in thin-film lithium niobate waveguides
15:00	Ujjal Chettri (INL, Ecole Centrale, Lyon) Optical bistability in germanium based ring resonators in the mid-infrared
15:15	Annabelle Bricout (C2N, Univ. Paris-Saclay) On-chip pulse compression in the mid-infrared wavelength range
<i>Conclusion & Discussions</i>	
15:30	Holograms and Optics Museum tour (registration required)

Poster Sessions (Coffee breaks and lunches) : FEMTO-ST Building Hall	
Christophe Finot (ICB, Dijon) Nonlinear synchronization dynamics in breathing fiber lasers : exploring new Arnold tongue patterns	
Florent Bessin (Lab. LphiA, Univ. Angers) Phase-like transition in mode locked fiber lasers induced by spectral filtering	
Simon Colombel (FEMTO-ST, Besançon) Nanofiber gas cell for nonlinear optics	
David-Gabriel Lange (INL, Lyon) Anomalous dispersion engineering for supercontinuum generation in SiN-on-LNOI waveguides	
Andrei Ermolaev (FEMTO-ST, Besançon) Dominant balance analysis of temporal reflection and dispersive wave generation in an optical fibre	
Maria Camila Diaz Sanchez (C2N, Paris-Saclay) Pulse compression schemes in silicon nitride variable-width waveguides	
Roseni Vences Robert (ICB, Dijon) Towards Spectral Shaping of Kerr Combs in a Programmable Optical Fibre Cavity	
Gil Fanjoux (FEMTO-ST, Besançon) , Far-detuned intramodal FWM in optical microfiber	