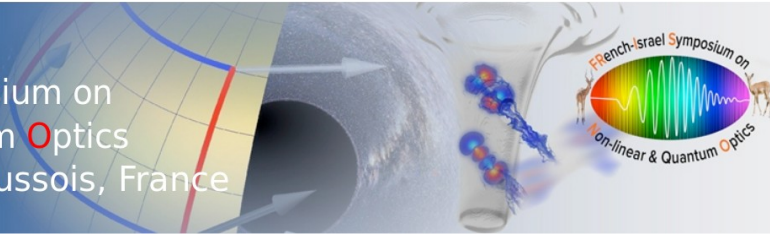


FRISNO 15

French-**I**srael Symposium on
Non-**L**inear & **Q**uantum **O**ptics
March 24-29, 2019, Aussois, France



15th French-Israeli Symposium on Nonlinear and Quantum Optics

FRISNO 15

March 24 – March 29, 2019

Aussois, France

PROGRAM



Centre Paul Langevin, CAES - CNRS,
73500 Aussois, FRANCE

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PROGRAM

Sunday March 24, 2019

16:00 - 24:00	Arrival and check-in
19:00 - 21:00	Dinner buffet

Monday March 25, 2019

8:30 *Opening Remarks: Robert Kuszelewicz*

Session Mon-A: High intensity optics

Chair: Robert Kuszelewicz

8:50 **Jean-Pierre Wolf (invited)**

High Intensity Laser Filaments and Applications to Atmospheric Science

9:30 **Omri Gat**

Cnoidal waves for accessible high power and wide-band microresonator frequency combs

10:00 **Daniel Bloch et al.**

Experimental test of the distribution of atomic trajectories at grazing incidence in a micrometric thin vapour cell

10:30 **Coffee Break**

Session Mon-B: High resolution imaging

Chair: Yehiam Prior

11:00 **Hervé Rigneault**

Compressive Raman Imaging

11:30 **Uri Rossman**

Super-resolution enhancement by quantum image scanning microscopy

12:00 **Marc Guillon et al.**

speckle patterns for 3D super-resolution microscopy and wavefront sensing

12:30 **Lunch and Afternoon break**

Session Mon-C: Optics in complex media

Chair: Marc Guillon

17:50 **Sylvain Gigan (invited)**

A sneak peek with light into opaque materials

18:30 **Patrick Sebbah**

Control of Light in Scattering Media by Gain and Loss

19:00 **End of Session**

19:30 **Dinner**

20:30 *Poster session Mon-P*

Tuesday March 26, 2019

Session Tue-A: Ultra short pulses

Chair: Benoît Boulanger

- 9:00 **Nirit Dudovich (invited)**
High Harmonic Generation Interferometry
- 9:40 **Wenbin Zhang et al.**
Dissociative Frustrated Double Ionization of Molecules in Strong Laser fields
- 10:10 **Sharly Fleischer**
Echo Spectroscopy in Multi-level Quantum-Mechanical Rotors
- 10:40 **Coffee Break**

Session Tue-B: Control and measurement of light

Chair: Hervé Rigneault

- 11:00 **Gregory Gredat**
Improvement of the stabilization loops performances of a DF-VECSEL dedicated to cesium CPT clocks application by fully-correlated multi-mode pumping
- 11:30 **Eran Lustig**
Photonic topological insulator in synthetic dimensions
- 12:00 **Moti Fridman**
Temporal measurement of the entire electric field of ultrafast signals
- 12:30 **Lunch and Afternoon break**

Session Tue-C: Theoretical optics

Chair: Omri Gat

- 18:00 **Eli Pollak**
Consequences of time averaging of weak values
- 18:30 **Ady Arie**
The optical Stern-Gerlach effect
- 19:00 **End of Session**
- 19:30 **Dinner**
- 20:30 ***Poster session Tue-P***

Wednesday March 27, 2019

Session Wed-A : Quantum optics I

Chair: Christophe Finot

- 9:00 **Ofer Firstenberg**
Towards rare-gas quantum optics
- 9:30 **Jeremy Raskop et al.**
Quantum optics with waveguide-coupled atomic ensembles
- 10:00 **Pascal Neveu et al.**
Coherent Population Oscillations-Based Light Storage
- 10:30 **Coffee Break**

Session Wed-B : Nonlinear dynamical systems

Chair: Eli Pollack

- 10:50 **German de Valcarcel (invited)**
From nonlinear to quantum in multimode optical cavities
- 11:30 **Jorge Tredicce et al.**
Predicting bifurcations and extreme events in optical systems
- 12:00 **Boris A. Malomed**
Nonlinear dissipative photonics with spin-orbit coupling
- 12:30 **Lunch and Afternoon break**

Session Wed-C: Molecular and organic materials

Chair: Daniel Bloch

- 18:00 **Tal Schwartz**
Strong Coupling of Light with Collective THz Vibrations in Organic materials
- 18:30 **Ilya Tutunnikov**
Chiral Molecules in Laser Fields with twisted polarization
- 19:00 **End of Session**
- 19:30 **Conference Dinner**

Thursday March 28, 2019

Session Thu-A: Fiber optics

Chair: Moti Fridman

- 8:50 **Katarzyna Krupa (invited)**
Nonlinear dynamics in multimode fibers
- 9:30 **Sonia Boscolo, Frédéric Audo and Christophe Finot**
Self-phase modulation patterns in optical fibres
- 10:00 **Rafi Weill**
Thermalization and Bose-Einstein condensation of photons in everyday fibres
- 10:30 **Coffee Break**

Session Thu-B: Plasmonics and metamaterials I

Chair: Adi Salomon

- 10:50 **Andrea Bragas (invited)**
Hypersonic surface wave generation and detection using single plasmonic nanoantennas
- 11:30 **Martti Kauranen (invited)**
Resonances and local fields of nonlinear metasurfaces
- 12:10 **Giuseppe Marino et al.**
Second harmonic generation from semiconductor metasurfaces
- 12:50 **Lunch and Afternoon break**
- 13:45 - 17:30: **Excursion**

Session Thu-C: Plasmonics and metamaterials II

Chair: Yehuda Band

- 18:00 **Adi Salomon et al.**
Generating 'Hot-Spots' on Smooth Metallic Surfaces and their Characterization by SHG and Cathodoluminescence
- 18:30 **Mathieu Chauvet et al.**
Experimental demonstration of plasmon-soliton coupling
- 19:00 **End of Session**
- 19:30 **Dinner**

Friday, March 29, 2019

Session Fri-A: Quantum optics II

Chair: Ofer Firstenberg

- 9:00 **Martin Oheim et al.**
Fast, multicolor 3-D tissue imaging with a single-objective two-photon virtual light-sheet microscope
- 9:30 **Dimitrii Tanese et al.**
Light patterning for two-photon multicell targeting: Multispot generation and light induced heating
- 10:00 **Nicolo Accanto et al.**
Multiplexed temporally focused light shaping for precise in-depth optogenetic stimulation
- 10:30 **Coffee Break**

Session Fri-B: Biophotonics

Chair: Dan Oron

- 10:50 **Jing Jietai (invited)**
Quantum light sources based on four-wave mixing processes from hot atomic vapor
- 11:30 **Yaron Bromberg et al.**
Generation of entangled photons with tailored correlations for quantum wavefront shaping
- 12:00 **Dmitry Yankelev et al.**
Quadrature phase detection in atom interferometry
- 12:30 **Concluding remarks : Dan Oron**
- 12:40 **Lunch**
- 13:30 **End of the Conference**