# SYMPOSIUM OPTIS OPTICS & SINGULARITIES

### PR GRAM

#### WEDNESDAY, NOVEMBER 16TH

- 13H30 Registration and refreshment.
- **14H00 ERIC DEPREZ** Director of Institut d'Alembert, and **ISABELLE LEDOUX** Director of LPQM: Welcome address.
- 14H15 MÉLANIE LEBENTAL & JOSEPH ZYSS: Introductory words.
- 14H30 LORENZO MARRUCCI Berry phases and spin-orbit optical phenomena.
- **15H A. CHOPINAUD** Duplication of high-helicity topological charges via frequency upconversion in atomic vapor.
  - Z. DENIS Measurement of the net topological charge of disordered optical multivortice.
- 15H15 JOSÉ J. GIL Spin angular momentum of 3D polarization states.
- 15H30 Break with POSTER SESSION
- 16H15 MARC BRUNEL Stationary transverse structures in solid-state degenerate-cavity lasers.
- **16H45 DANIEL BLOCH** *Highly-focused Laguerre-Gauss beams and on-axis response: magnetic field, sensitivity to gradients, near-axis chirality, ...*
- 17H00 BARBARA DIETZ Microwave networks and quantum graph.
- 17H15 ALBERTO AMO Edge states in micropillar photonic lattices

#### THURSDAY MORING, NOVEMBER 17TH

NaBi LPQM

- 9H15 KEITARO NAKATANI Vice-President for Research of ENS Paris Saclay: welcome address.
- 9H30 MICHAEL BERRY Nature's optics and our understanding of light.
- 10H30 SIMON PIGEON Controlling superfluid vortices in polariton devices. THIERRY RUCHON Attosecond beams carrying an orbital angular momentum.

#### BREAK WITH POSTER SESSION.

- **11H15** ETIENNE BRASSELET Smart liquid crystal spin-orbit photonic.
- 11H45 CLAIRE MICHEL Experimental photonic superfluidity in a bulk nonlinear medium. NATALIYA KUNDIKOVA Effects of spin-orbit interaction of light in multimode optical fibers. STEFAN BITTNER Spatio-temporal dynamics of broad-area semiconductor lasers.
- 12H15 SYLVAIN GIGAN Controlling light in scattering media : imaging and beyond.





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THURSDAY AFTERNOON, NOVEMBER 17TH

LUNCH (Pavillon des Jardins), COFFEE (Curie Hall)

- 14H ADY ARIE Self accelerating beams of light and matter.
- **14H30** L. CHOPINEAU Optical vortices at ultra-high intensity.

G. PARIENTÉ AND F. QUÉRÉ Spatio-temporal light springs: extended encoding of orbital angular momentum in ultrashort pulses.

- A. K. FEDOROV Nonconventional superfluids of polar molecules in subwavelength lattices.
- **15H** MARC GUILLON Saturated negative and complementary speckle patterns.
- **15H30** JOSEPH ZYSS and STEFAN BITTNER Probing borders between geometry and physics with micro-billiard lasers.

BREAK WITH POSTER SESSION.

- **16H15** EUGÈNE BOGOMOLNY Exact solution of scattering on two Aharonov-Bohm vortices.
- **16H45** JEAN-PIERRE GALAUP / LAURENCE PRUVOST Twisted light exchanged with atoms and optical tweezers.
- 17H15 ULF LEONHARDT Geometric regularisation of the Casimir force.

17H45 Concluding remarks by MICHAEL BERRY.

