Prof. Julien Laurat, Laboratoire Kastler Brossel

- Full Conference List (July 1st, 2022) -

(contributions by group members not included)

- 62. The 27th International Conference on Atomic Physics ICAP2022 (Canada, 2022), *Quantum optics with cold atoms trapped along nanowaveguides* (Plenary speaker)
- 61. The French Optical Society Meeting (France, 2022), *Highly-efficient optical quantum memories based on large ensembles of cold atoms* (invited)
- 60. Optica Quantum 2.0 (USA, 2022), Quantum interconnects: storing and converting quantum information (invited)
- 59. OSA Quantum Information and Measurement VI (online, 2021), *Entangling highly-efficient quantum memories* (invited)
- 58. NonGauss workshop in Quantum Physics (online 2021), Distributing entanglement in quantum networks (invited)
- 57. 2nd Workshop on waveguide QED (online, 2021), *Interfacing cold atoms and nanoscale waveguides* (invited)
- 56. Long range interacting quantum systems, French-German WE-Heraeus seminar (online, 2020), *Quantum optics with nanoscale waveguides and cold atoms* (invited)
- 55. Quantum Technology International Conference QTech 2020 (online, 2020), *Highly-efficient ensemble-based quantum memory for light* (Plenary speaker)
- 54. OSA Frontiers in Optics (online, 2020), Quantum Optics with nanoscale waveguides and cold atoms (invited)
- 53. WaveguideQED workshop online (2020), Quantum optics with nanofiber-trapped atoms (invited)
- 52. Photonics Online Meetup POM 2020 (online meeting, 2020), *Quantum optics with nanoscale waveguides and cold atoms* (contributed)
- 51. Optical nanofiber applications: from quantum to bio technologies ONNA 2019 (Japan, 2019), Waveguide-coupled single collective excitation of atomic arrays (invited)
- 50. European Optical Society Biennal Meeting EOSAM 2018 (NL, 2018), *Quantum optics with nanoscale waveguides and trapped atomic arrays* (invited)
- 49. Laser Physics Workshop 2018 (UK, 2018), Coupling a single collective excitation of atomic arrays to a nanoscale waveguide (invited)
- 48. 2nd Workshop for quantum repeaters and networks (Austria, 2017), *From free-space to all-fibered light-matter interfaces* (invited)
- 47. International Symposium 20 years of Nano-Optics (Germany, 2017), Combining cold atoms and nanoscale waveguides: generation, storage and reflection of single photons (invited)
- 46. 15th International Conference on Squeezed states and Uncertainty Relations ICSSUR (Korea, 2017), *Optical hybrid quantum information: hybrid entanglement and slow decoherence* (invited)
- 45. Central European Workshop on Quantum Optics CEWQO 2017 (Denmark, 2017), Coupling atom arrays to nanofibers: generation, storage and reflection of single photons (invited)
- 44. Optical nanofiber applications: from quantum to bio technologies ONNA 2017 (Japan, 2017), Collective effects in 1D nanoscale waveguides coupled to cold atoms (invited)
- 43. Photons beyond qubit 2017 (Czech Republic, 2017), *Hybrid entanglement of light: remote state preparation and steering* (invited)
- 42. ICFO Workshop on Quantum Light-Matter Interactions in Low Dimensions (Spain, 2017), Coupling atom arrays to nanofibers: generation, storage and reflection of single photons (invited)
- 41. Laser Physics Workshop 2016 (Armenia, 2016), Coupling one dimensional nanoscale waveguides to cold atoms (invited)
- 40. Central European Workshop on Quantum Optics 2016 (Greece, 2016), *Storing light and controlling its transport in 1D nanoscale waveguides coupled to cold atoms* (invited)
- 39. SPIE Photonics West (USA, 2016), *Interacting cold atoms with tightly guided light* (invited)
- 38. The 46th Winter Colloquium on the Physics of Quantum Electronics PQE-2016 (USA, 2016), Combining cold atoms and nanophotonics-a memory for tightly guided light in an optical nanofiber (invited)

- 37. Quantum Information Processing and Communication QIPC 2015 (UK, 2015), From free-space quantum memories to all-fibered implementations (contributed)
- 36. Optical nanofiber applications: from quantum to bio technologies ONNA 2015 (Japan, 2015), Reversible storage of tighty guided light in an optical nanofiber (invited)
- 35. SPIE Optics+OptoElectronics (Czech Republic, 2015), *Quantum memories with cold neutral atoms : from free-space to all-fibered implementations* (invited)
- 34. Photons beyond qubit 2015 (Czech Republic, 2015), Sculpting and storing the quantum light (invited)
- 33. Workshop on nanomagnetism, spin electronics, carbon-based materials and quantum optics NanoSECQO 2015 (France, 2015), *Long-distance quantum networks with optical hybrid resources* (invited)
- 32. Australian Institute of Physics Congress AIP 2014 (Australia, 2014), Sculpting the quantum light (invited)
- 31. Conference on Quantum Communication, Measurement and Computing QCMC (China, 2014), *Long-distance quantum networking based on optical hybrid resources* (contributed)
- 30. 7th Italian Quantum Information Science Conference IQIS (Italy, 2014), *Optical hybrid quantum information* (invited)
- 29. 23rd International Laser Physics Workshop LPHYS (Bulgaria, 2014), *Remote creation of of optical hybrid entanglement* (invited)
- 28. 21st European Central European Workshop on Quantum Optics CEWQO 2014 (Belgium, 2014), *Quantum networking with optical hybrid resources* (invited)
- 27. Photons beyond qubits (Czech Republic, 2014), *Entangling particle-like and field-like optical qubits at a distance* (invited)
- 26. Quantum Information and Measurements OSA QIM (Germany, 2014), *Entangling particle-like and field-like optical qubits at a distance* (contributed)
- 25. Asia-Pacific conference and workshop on quantum information science (Korea, 2013), *Optical hybrid quantum networks* (invited)
- 24. Quantum Information Processing and Communication QIPC 2013 (Italy, 2013), *Optical hybrid quantum information- some recent illustrations* (contributed)
- 23. Frontiers of Quantum and Mesoscopic Thermodynamics FQMT'13 (Czech Republic, 2013), Witnessing single-photon entanglement with continuous-variable measurements (invited)
- 22. 13th International Conference on Squeezed states and Uncertainty Relations ICSSUR (Germany, 2013), *Optical hybrid quantum networks* (invited)
- 21. 22nd International Laser Physics workshop L'Phys (Czech Republic, 2013), *A reversible quantum memory for qubits encoded in twisted photons* (invited)
- 20. Photons beyond qubits (Czech Republic, 2013), Optical hybrid quantum information (invited)
- 19. Frontiers of Quantum and Mesoscopic Thermodynamics FQMT'11 (Czech Republic, 2011), *Quantum-to-classical transition of single-photon counters* (invited)
- 18. 18th Central European Workshop on Quantum Optics CEWQO'18 (Spain, 2011), *Quantum decoherence of single-photon counters* (invited)
- 17. 5th Asia-Pacific conference on quantum information science 5'APCQIS (China, 2010), *Quantum networking with continuous variables of atoms and light* (invited)
- 16. Conference on Quantum Communication, Measurement and Computing QCMC'10 (Australia, 2010), *Quantum memory and repeater architecture with continuous variables* (invited)
- 15. CLEO (USA, 2010), Experimental characterization of optical detectors for single-photon subtraction (contributed)
- 14. 1st ICST Conference on Quantum Communication and Quantum Networking (Italy, 2009), *Matter-matter entanglement* (invited)
- 13. Conference on Quantum Communication, Measurement and Computing QCMC'08 (Canada, 2008), *Matter-matter entanglement for quantum networks* (invited)
- 12. Frontiers of Quantum and Mesoscopic Thermodynamics FQMT'08 (Czech Republic, 2008), *Quantum networking with atomic ensembles in the single excitation regime* (invited)
- 11. Foundations of Quantum Mechanics and Information with Atoms and Photons (Italy, 2008), Entanglement of atomic ensembles in the single excitation regime (invited)

- 10. Solvay workshop on Bits, Quanta, and Complex Systems (Belgium, 2008), *Quantum networking with atomic ensembles : single excitation and continuous variables* (invited)
- 9. CLEO (Germany, 2007), Quantum networking with atomic ensembles in the single excitation regime (contributed)
- 8. Workshop on Quantum Engineering with Neutral Atoms and Light (Germany, 2007), Functional quantum nodes for entanglement distribution over a scalable network (invited)
- 7. French-Israeli symposium on non-linear and quantum optics FRISNO'9 (France, 2007), Conditional control of remote atomic memories for quantum networking (contributed)
- 6. Conference on quantum communication, measurement and computing QCMC'06 (Japan, 2006), *Efficient retrieval of a single excitation stored in an atomic ensemble* (invited)
- 5. Continuous variables quantum information processing CVQIP'06 (Denmark, 2006), *Quantum communications with atomic ensembles in the single excitation regime* (invited)
- 4. Quantum Information Processing and Communications QIPC (Italy, 2004), *Experimental generation of quadrature entanglement in a self-phase locked OPO* (contributed)
- 3. Continuous variables quantum information processing CVQIP'04 (Germany, 2004) *Experimental generation of EPR beams with a self-phase locked OPO* (invited)
- 2. ICO topical meeting on polarization optics (Finland, 2003) *Polarization couplings in optical cavity* (contributed)
- 1. Informal quantum information gathering IQING (UK, 2002) *Bright EPR beams with a self-phase locked OPO* (contributed)

Tutorials

- 11. Winter School 2018 KTH, Linné center on Advance Optics and Photonics ADOPT (Sweden, 2018), From free-space to all-fibered light-matter interfaces-combining cold atoms and nanophotonics.
- 10. IST Young Scientists Symposium, Memory across Sciences (Austria, 2017), Stopping the light: a quantum memory for future information networks.
- 9. Doctoral school of the NextLite Project (Austria, 2016), *Optical quantum memories : from free-space to all-fibered implementations.*
- 8. Quantum Information in Paris Network QuPa (France, 2013), Optical hybrid quantum information
- 7. Ecole résidentielle des nanosciences Ile-de-France (France, 2012), *Cold atoms for quantum information science and technology*
- 6. PRI 2012 (France, 2012), Cold atoms for quantum information science and technology
- 5. School on quantum manipulation of atoms and photons QMAP (China, 2011), *Lectures on quantum state engineering*
- 4. School on quantum information science and workshop on quantum measurement (Taiwan, 2011)
- 3. GDR 'Information quantique, fondements et applications' (France, 2011), *Light-light, light-matter and matter-matter entanglement : a review*
- 2. Third Russian-French laser physics workshop (Russia, 2008), *How to generate heralded entanglement between matter systems : two examples* (invited)
- 1. GDR 'Information et communication quantique' (France, 2008), Recent developments of light-matter interfaces based on atomic ensembles

General audience presentation

- 5. Inauguration 2020 of the SU Quantum Information Center (France, 2020), *Slowing and stopping the light for quantum networks: Playing with cold atoms*
- 4. Université Permanente de Nantes (France, 2019), *Traitement quantique de l'information*. Available on YouTube.
- 3. Congrès de la Société Française d'Optique (France, 2016), Arrêter la lumière dans une fibre: la rencontre des atomes froids et de la nanophotonique.
- 2. Colloque de la Société Royale des Sciences de Liège (Belgium, 2015), Les vitesses folles de la lumière
- 1. Sciences à Coeur UPMC (France, 2014), Le traitement quantique de l'information