

Publications list

- [1] T. Boulier, E. Cancellieri, N. D. Sangouard, R. Hivet, **Q. Glorieux**, E. Giacobino, A. Bramati. Lattices of quantized vortices in polariton superfluids. *Comptes Rendus Académie des Sciences*. **17**, 893 (2016).
 - [2] T. Boulier, E. Cancellieri, N. D. Sangouard, **Q. Glorieux**, A. V. Kavokin, D. M. Whittaker, E. Giacobino, and A. Bramati. Injection of Orbital Angular Momentum and Storage of Quantized Vortices in Polariton Superfluids. *Phys. Rev. Lett.* **116**, 116402 (2016).
 - [3] W. Geng, M. Manceau, N. Rahbany, V. Sallet, M. De Vittorio, L. Carbone, **Q. Glorieux**, A. Bramati, C. Couteau. Localised excitation of a single photon source by a nanowaveguide. *Scientific Reports* **6**, 19721 (2016).
 - [4] S. Vezzoli, M. Manceau, G. Leménager, **Q. Glorieux**, E. Giacobino, L. Carbone, M. De Vittorio, A. Bramati. Exciton Fine Structure of CdSe/CdS Nanocrystals Determined by Polarization Microscopy at Room Temperature. *ACS Nano* **9**, 7992 (2015).
 - [5] T. Boulier, H. Tercas, D.D. Solnyshkov, **Q. Glorieux**, E. Giacobino, G. Malpuech, A. Bramati. Vortex chain in a resonantly pumped polariton superfluid. *Scientific Reports* **5**, 9230 (2015).
 - [6] J.B. Clark, R.T. Glasser, **Q. Glorieux**, U. Vogl, T. Li, K.M. Jones, and P.D. Lett. Quantum mutual information of an entangled state propagating through a fast-light medium. *Nature Photonics* **8**, 515 (2014).
 - [7] M. Manceau, S. Vezzoli, **Q. Glorieux**, F. Pisanello, E. Giacobino, L. Carbone, M. De Vittorio, A. Bramati. Effect of charging on CdSe/CdS dot-in-rods single-photon emission. *Phys. Rev. B* **90**, 035311 (2014).
 - [8] U. Vogl, R. T. Glasser, J. B. Clark, **Q. Glorieux**, T. Li, N. V. Corzo, P. D. Lett. Advanced quantum noise correlations. *New Journal of Physics*, **16**, 013011 (2014).
 - [9] N.V. Corzo, **Q. Glorieux**, A.M. Marino, J.B. Clark, R.T. Glasser, P.D. Lett. Rotation of the noise ellipse for squeezed vacuum light generated via four-wave mixing. *Physical Review A* **88**, 043836 (2013).
 - [10] B.M. Sparkes, J. Bernu, M. Hosseini, J. Geng, **Q. Glorieux**, P.A. Altin, P.K. Lam, N.P. Robins, B.C. Buchler. Gradient echo memory in an ultra-high optical depth cold atomic ensemble. *New Journal of Physics* **15**, 085027 (2013).
 - [11] J.B. Clark, **Q. Glorieux**, P.D. Lett. Spatially addressable readout and erasure of an image in a gradient echo memory. *New Journal of Physics* **15**, 035005 (2013).
 - [12] U. Vogl, R.T. Glasser, **Q. Glorieux**, J.B. Clark, N.V. Corzo, P.D. Lett. Experimental characterization of Gaussian quantum discord generated by four-wave mixing. *Physical Review A* **87**, 010101 (2013).
 - [13] B.M. Sparkes, J. Bernu, M. Hosseini, J. Geng, **Q. Glorieux**, P.A. Altin, P.K. Lam, N.P. Robins, B.C. Buchler. An ultra-high optical depth cold atomic ensemble for quantum memories. *Journal of Physics*, **467** 012009 (2013).
 - [14] **Q. Glorieux**, J.B. Clark, N.V. Corzo, P.D. Lett. Generation of pulsed bipartite entanglement using four-wave mixing. *New Journal of Physics* **14**, 123024 (2012).
 - [15] A.M. Marino, J.B. Clark, **Q. Glorieux**, P.D. Lett. Extracting spatial information from noise measurements of multi-spatial-mode quantum states. *European Physical Journal D* **66**, 1 (2012).
 - [16] **Q. Glorieux**, J.B. Clark, A.M. Marino, Z. Zhou, P. D. Lett, Temporally multiplexed storage of images in a gradient echo memory. *Optics Express* **20**, 12350 (2012).
 - [17] J.B. Clark, Z. Zhou, **Q. Glorieux**, A.M. Marino, P.D. Lett. Imaging using quantum noise properties of light. *Optics Express* **20**, 17050 (2012).
 - [18] **Q. Glorieux**, L. Guidoni, S. Guibal, J.P. Likforman, T. Coudreau. Quantum correlations by four-wave mixing in an atomic vapor in a nonamplifying regime: Quantum beam splitter for photons. *Physical Review A* **84**, 053826 (2011).
 - [19] I.H. Agha, C. Giarmatzi, **Q. Glorieux**, T. Coudreau, P. Grangier, G. Messin. Time-resolved detection of relative-intensity squeezed nanosecond pulses in an ^{87}Rb vapor. *New Journal of Physics* **13**, 043030 (2011).
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- [20] **Q. Glorieux**, R. Dubessy, S. Guibal, L. Guidoni, J.-P. Likforman, T. Coudreau, and E. Arimondo, Double- Λ microscopic model for entangled light generation by four-wave mixing. *Phys. Rev. A* **82**, 033819 (2010).
- [21] **Q. Glorieux**, T. Coudreau, L. Guidoni, JP. Likforman. Strong quantum correlations in four wave mixing in ^{85}Rb vapor. *Proc. of SPIE* **7727**, 772703 (2010).
- [22] S. Removille, R. Dubessy, **Q. Glorieux**, S. Guibal, T. Coudreau, L. Guidoni, JP. Likforman. Photoionisation loading of large Sr^+ ion clouds with ultrafast pulses. *Applied Physics B* **97**, 47 (2009).
- [23] S. Removille, R. Dubessy, B. Dubost, **Q. Glorieux**, T. Coudreau, S. Guibal, JP. Likforman, L. Guidoni. Trapping and cooling of Sr^+ ions: strings and large clouds. *Journal of Physics B* **42**, 154014 (2009).
- [24] V. Detalle, **Q. Glorieux**, R. Bruder, D. L'Hermite, A. Semerok. Laser induced breakdown spectroscopy (LIBS): a new analytical technique for in situ study of painted artworks. *Actualites Chimiques*, **98**, 104 (2007).

Dissemination articles

- 1- Rush a light wave and you'll break its data, say scientists. *Science Daily* (2014).
- 2- Physicists Store Short Movie In A Cloud of Gas. *MIT Technology Review* (2012).
- 3- Short movies stored in an atomic vapor. *Science Daily* (2012).
- 4- Storing a short movie in an atomic vapor. *SPIE NewsRoom* (2012).

List of 5 invited talks

- 1- International Workshop on Quantum Fluids of Light 2016, Invited Talk – Edinburgh, UK.
 - 2- Photonics West 2015, Invited Talk and Session Chair – San Francisco, USA.
 - 3- International Conference of Small Science ICSS Nano 2014, Invited Talk – Hong-Kong, China.
 - 4- Non-Linear Optics. OSA Meeting, 2013, Invited Talk – Hawaii, USA.
 - 5- International Conference on Quantum Information 2011, Post deadline invited talk – Ottawa, Canada.
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