

# GDR IQFA - 6th Colloquium - Palaiseau

Wednesday, November 18, 2015

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TIME	EVENT
8:30 am - 9:00 am	Opening the Colloquium - A. Browaeys, T. Chanelière, and S. Tanzilli
9:00 am - 10:30 am	New Qbit Devices - NQD (IOGS Theater) - Pascal Degiovanni
09:00 - 10:00	› Quantum networks for computing and communication with diamond spins - <i>Ronald Hanson, TU Delft (NL)</i>
10:00 - 10:30	› The Andreev Qubit - <i>Hugues Pothier, CEA Saclay (F)</i>
10:30 am - 11:00 am	Coffee break (IOGS Atrium)
11:00 am - 11:30 am	New Qbit Devices - NQD (IOGS Theater) - Pascal Degiovanni
11:00 - 11:30	› Controlling spin relaxation with a cavity - <i>Audrey Bienfait, CEA Saclay (F)</i>
11:30 am - 12:00 pm	Quantum Information Foundations - FOUND (IOGS Theater) - Antoine Browaeys
11:30 - 12:00	› Measurement dependence and limited detection nonlocality - <i>Djeylan Aktas, Université Nice Sophia Antipolis (F)</i>
12:00 pm - 1:30 pm	Lunch (Cafeteria Ecole Polytechnique)
1:30 pm - 3:00 pm	Quantum Simulations & Processing - QSP (IOGS Theater) - Antoine Browaeys
13:30 - 14:30	› Quantum computation and learning - <i>Hans Briegel, University of Innsbruck (AT)</i>
14:30 - 15:00	› Quantum information protocols in Continuous Variable - <i>Giulia Ferrini, Université Paris Diderot (F)</i>
3:00 pm - 3:30 pm	Coffee break (IOGS Atrium)
3:30 pm - 5:00 pm	Quantum Communication - QCOM (IOGS Theater) - Eleni Diamanti
15:30 - 16:30	› Selected topics on quantum and postquantum correlations - <i>Pawel Horodecki, University of Gdansk (PL)</i>
16:30 - 17:00	› Detector-device-independent quantum key distribution - <i>Anthony Martin, University of Geneva (CH)</i>
5:00 pm - 7:00 pm	Poster Session 1 (IOGS Atrium)

Thursday, November 19, 2015

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TIME	EVENT
9:00 am - 10:30 am	Entanglement and non-classical states - ENS (IOGS Theater) - Nicolas Treps
09:00 - 10:00	› About states and modes in quantum optics - <i>Claude Fabre, UMPC - ENS Paris (F)</i>
10:00 - 10:30	› Experimental generation of optical squeezed cat states by photon adjunction - <i>Jean Etesse, Inst.</i>

10:30 am - 11:00 am	Coffee break (IOGS Atrium)
11:00 am - 12:00 pm	Entanglement and non-classical states - ENS (IOGS Theater) - Nicolas Treps
11:00 - 11:30	› Few Photon Non-linearities using Rydberg Polaritons - <i>Rajiv Boddeda, Inst. Optique Graduate School (F)</i>
11:30 - 12:00	› Integrated AlGaAs Source of Highly Indistinguishable and Energy-Time Entangled Photons - <i>Claire Autebert, Université Paris Diderot (F)</i>
12:00 pm - 1:30 pm	Lunch (Cafeteria Ecole Polytechnique)
1:30 pm - 3:00 pm	Quantum Metrology - QMET (IOGS Theater) - Pérola Millman
13:30 - 14:30	› Quantum metrology: an overview of recent results - <i>Luiz Davidovich, Uni. Federal do Rio de Janeiro (BR)</i>
14:30 - 15:00	› Quantum-enhanced detection of atomic spins - <i>Ricardo Jimenez-Martinez, Institute of Photonic Sciences (ES)</i>
3:00 pm - 3:30 pm	Coffee break (IOGS Atrium)
3:30 pm - 5:00 pm	Quantum Information Foundations - FOUND (IOGS Theater) - Alexia Auffèves
15:30 - 16:30	› Quantum theory without probabilities - <i>Renato Renner, ETH - Zurich (CH)</i>
16:30 - 17:00	› Quantum Protocols within Spekkens' Toy Model - <i>Leonardo Disilvestro, Telecom ParisTech (F)</i>
5:00 pm - 7:00 pm	Poster Session 2 (IOGS Atrium)
7:00 pm - 9:30 pm	Colloquium's buffet (IOGS Atrium)

## Friday, November 20, 2015

TIME	EVENT
9:00 am - 10:30 am	Coherent Manipulation of Qbits - CMQ (IOGS Theater) - Antoine Browaeys
09:00 - 10:00	› Quantum science and technology with superconducting circuits - <i>Andreas Wallraff, ETH - Zurich (CH)</i>
10:00 - 10:30	› Coherent control of an artificial atom with few photon pulses - <i>Lorenzo De Santis, Lab. Photonique &amp; Nanostructures - CNRS (F)</i>
10:30 am - 11:00 am	Coffee break (IOGS Atrium)
11:00 am - 12:00 pm	Coherent Manipulation of Qbits - CMQ (IOGS Theater) - Antoine Browaeys
11:00 - 11:30	› Observing quantum state diffusion by heterodyne detection of fluorescence - <i>Philippe Campagne-Ibarcq, ENS Paris (F)</i>
11:30 - 12:00	› Mixed-element logic gates for trapped-ion qubits - <i>Ting Rei Tan, National Institute of Standards and Technology (USA)</i>
12:00 pm -	

1:30 pm Lunch (Cafeteria Ecole Polytechnique)

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1:30 pm - 2:30 pm Quantum Communication - QCOM (IOGS Theater) - Sébastien Tanzilli

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13:30 - 14:00 › Quantum Fingerprinting with Coherent States for Multiple Clients - *Niraj Kumar, Télécom ParisTech (F)*

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14:00 - 14:30 › Unidimensional continuous-variable quantum key distribution - *Frédéric Grosshans, Université Paris Sud (F)*

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2:30 pm - 3:00 pm Quantum Simulations & Processing - QSP (IOGS Theater) - Antoine Browaeys

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14:30 - 15:00 › Universally Reconfigurable Linear Optics - *Chris Sparrow, University of Bristol (UK)*

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3:00 pm - 3:30 pm Coffee break (IOGS Atrium)

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4:00 pm - 4:30 pm Closing the Colloquium - A. Browaeys, T. Chanelière, and S. Tanzilli

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