



Colloque - June 17th - 18th, 2021

Recent Advances on Quantum Computing

Organisateurs : Frédéric Magniez (Collège de France),
Alex Bredariol Grilo (LIP6)

Chaire Informatique et sciences numériques

Program

10h > 18h - salle 2

Open to the public, within space limits, subject to availability.

Ouvert au public, en demi-jauge, dans la limite des places disponibles.

June 17th

10.00 Nicolas Sangouard, IPhT - CEA/CNRS

Quantum Safe Crypto-System with Device-Independent Security Guarantees

11.00 Paul Renault, LKB - SU/CNRS/ENS

Optimisation Using Machine Learning of the Pump Spectrale Shape to Generate Multimode Squeezing

11.40 Federico Centrone, LIP6 - SU/CNRS

Charging Batteries with Quantum Squeezing

12.20 Break

14.00 Ivan Šupić, LIP6 - SU/CNRS

Quantum Networks Self-Test all Entangled States

15.00 Jonas Landman, IRIF - UP/CNRS

Recent Quantum Algorithms for Machine Learning and Neural Networks

15.40 Break

16.20 Robert Booth, LIP6 - SU/CNRS

Outcome Determinism in Measurement-Based Quantum Computing with Qudits

17.00 Pierre-Emmanuel Emeriau, LIP6 - SU/CNRS

Witnessing Wigner Negativity

17.40 Discussion

June 18th

10.00 Simon Apers, ULB/CWI

Quantum Complexity of Minimum Cut

11.00 Daniel Szilagy, IRIF - UP/CNRS

A Gradient Descent Perspective on Quantum Linear System Solvers

11.40 Léo Colisson, LIP6 - SU/CNRS

Non-Destructive Zero-Knowledge Proofs on Quantum States, and Multi-Party Generation of Authorized Hidden GHZ States

12.20 Break

14.00 David Barral, LKB - SU/CNRS/ENS

Nonlinear Waveguide Arrays and Triple Photons: Gaussian and Non-gaussian Resources for Continuous-Variable Quantum Information

15.00 Nathan Shettell, LIP6 - SU/CNRS

A Cryptographic Approach to Quantum Metrology

15.40 Break

16.20 Félicien Appas, MPQ - UP/CNRS

Flexible Entanglement-Distribution Network with an AlGaAs chip for Secure Communications

17.20 Eleni Diamanti, LIP6 - SU/CNRS

Updates on Paris Hub

17.40 Discussion

Chaire créée avec le soutien de

Inria

COLLÈGE
DE FRANCE
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Thomas Römer
Administrateur du Collège de France
11, place Marcelin-Berthelot, 75005 Paris
www.college-de-france.fr

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