## **Session Program**

17-29 Aug 2017



## 6th International Conference on New Frontiers in Physics (ICNFP2017)

Workshop on continuous variables and quantum information

## **Monday 21 August**

11:00 Workshop on continuous variables and quantum information: Session 2 Session | Location: Room 2 | Convener: Natalia Korolkova 11:00-11:30 Phase supersensitivity in an unbalanced SU(1,1) interferometer Speaker Dr Maria Chekhova 11:30-12:00 Squeezed light enhanced sensing of a micro-mechanical oscillator Speaker Prof. U L Andersen 12:00-12:30 Highly nonlinear quantum optics and optomechanics Speaker Prof. Radim Filip 12:30-13:00 From Quantum-Limited Measurements towards Quantum Squeezing Detection over Satellite Links **Speaker** Dr Christian Ralf Müller 13:30 15:00 Workshop on continuous variables and quantum information Session | Location: Room 2 | Convener: Natalia Korolkova 15:00-15:20 Dynamics of quantum correlations in two-mode Gaussian open quantum systems Speaker Aurelian Isar 15:20-15:40 Gaussian quantum steering of two bosonic modes in a squeezed thermal environment Speaker Mihaescu Tatiana 16:00 16:30 Workshop on continuous variables and quantum information Session | Location: Room 2 | Convener: Natalia Korolkova 16:30-17:00 Gaussian intrinsic entanglement Speaker Mr Ladislav Mišta 17:00-17:30 Relativistic and Device Independent Verifiable Quantum Computation Speaker Dr Petros Wallden

17:30-17:50

Gigahertz quantum signatures compatible with telecommunication technologies

Speaker

Matthew Thornton

17:50-18:10

Quantum advantage and fault tolerant universal quantum computing in continuous variables

Speaker

Tom Douce

18:30

## **Tuesday 22 August**

11:00 Workshop on continuous variables and quantum information **Session** | **Location:** Room 2 | **Convener:** Ulrik Lund Andersen 11:00-11:30 Quantum Frequency Combs: generation, characterization and applications Prof. Claude Fabre 11:30-12:00 Continuous quantum variables: from quantum computing to relativistic quantum information Speaker Nicolas Menicucci 12:00-12:30 Work is the source of gravity Speaker David Edward Bruschi 12:30-13:00 Tripartite continuous-variables coherence and entanglement from vacuum fluctuations Speaker Dr Sorin Paraoanu 13:30 15:00 Workshop on continuous variables and quantum information Session | Location: Room 2 | Convener: lorenzo maccone 15:20-15:40 Ultrafast Quantum Key Distribution with Ultra-Broad Squeezed Light Speaker Prof. Avi Pe'er 15:40-16:00 Observing superradiance in a vortex flow Speaker Mr Théo Torres Vicente 16:00 16:30 Workshop on continuous variables and quantum information Session | Location: Room 2 | Convener: Friedrich Koenig 16:30-17:00 Counting Unruh particles Speaker Prof. Andrzej Dragan 17:00-17:20 Mixing of positive and negative frequency waves at the optical horizon

Speaker

Dr Maxime Jacquet

17:20-17:40 Autonomous quantum machines and finite sized clocks

Speaker
Woods Mischa

17:40-18:10 Quantum networks: topology and spectral characterization

Speaker
Vesna Berec

18:10