**Subject:** Participation of Dr. Pascale Senellart at a workshop hosted by the University of Innsbruck

**Event:** 2nd International Workshop on Engineering of Quantum Emitter Properties, 4th-5th of December 2014

This event was envisioned as a workshop that brings together experts on tailoring the properties of the light emitted by a single quantum emitter. The topics it addressed ranged from single photons and entangled photon pair generation and detection, via cavity QED to the interaction of non-classical light with atomic ensembles. The workshop was held at the University and raised the interest of local students, which participated the lectures.

The list of invited speakers was very diverse including:

- Jonathan Finley, TMU, Munich
- Peter Michler, University of Stuttgart
- Arno Rauschenbeutel, VCQ, Vienna
- Emanuele Pelucchi, University College Cork
- Mohamed Bourennane, University of Stockholm
- Fabio Sciarrino, University of Roma

The filed of quantum information processing and communications is very popular, interdisciplinary and rapidly growing area of research.

In today's modern world the importance of this field of research is very often related to the data encryption and safeguarding.

The lecture delivered by Dr. Senellart gave a very rich overview of state of art research on quantum dots and their use in quantum information processing. Her presentation showed many aspects of today's use of quantum dots including the generation of nonclassical light and design of semiconductor based single-atom optical switches.