

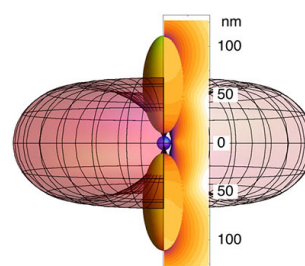
# Nanoscale quantum optics: contributions to Europe's competitiveness in science and technology

In the past 4 years the COST Action Nanoscale Quantum Optics (NQO) established and supported crosslinks between quantum science & technology, nanoscale optics & photonics and materials science. Here, we wish to highlight the Action's activities and introduce the first Market Research Study on the innovation potential of the field. Presentations will be followed by a panel discussion and by a networking buffet to discuss future opportunities for NQO.

## Time & Location

**Thursday, 4 April 2019**, from 9:00 to 14:30

**Manos Conférence & Business Center Director**  
135, Chaussée de Charleroi  
Brussels, 1060 Belgium



Since the event is limited to 60 participants, to facilitate the organization please register by email to [cost-nqo@uni-siegen.de](mailto:cost-nqo@uni-siegen.de) by no later than March 25

## Programme

- 9:00 - Introduction Session
  - *Welcome Address*, **Ronald De Bruin**, Director, COST Association, and **Irene D'Amico**, Vice-Chair, COST Action NQO
  - *The COST Association*, **Ralph Stübner**, Science Officer, COST Association
  - *The COST Action NQO*, **Mario Agio**, Chair, COST Action NQO
- 9:30 - Science Session
- WG1 Session
  - *Overview WG1*, **Christophe Couteau**, WG1 Leader, COST Action NQO
  - *Photoelectric readout of electron spin qubits in diamond at room temperature*, **Emilie Bourgeois**, University of Hasselt
  - *Coupling germanium vacancy centers to a micro-cavity*, **Alexander Huck**, Technical University of Denmark
- WG2 Session
  - *Overview WG2*, **Walter Pfeiffer**, WG2 Leader, COST Action NQO



- *Coherent energy and charge transfer processes in photovoltaic materials*, **Antonietta de Sio**, University of Oldenburg
- *From nonlinear to quantum hybrid plasmonics*, **Guillaume Bachelier**, CNRS
- WG3 Session
  - *Overview WG3*, **Thomas Durt**, WG3 Leader, COST Action NQO
  - *Spin chains for quantum technologies*, **Irene D'Amico**, University of York
  - *Strong coupling: Harnessing light-matter entanglement in quantum technologies*, **Branko Kolaric**, University of Namur
- WG4 Session
  - *Overview WG4*, **Peter Rabl**, WG4 Leader, COST Action NQO
  - *Quantum optics with laser-cooled atoms coupled to optical nanofibers*, **Philipp Schneeweiß**, Technische Universität Wien
  - *Exploiting cooperative light scattering in dense atomic arrays*, **Mariona Moreno**, ICFO
- 11:30 - Coffee Break
- 11:45 - Gender Balance (GB) and Early-Career Investigators (ECI) Session
  - *Gender equality surveys*, **Ruth Oulton**, GB Advisor, COST Action NQO
  - *Supporting early-career investigators*, **Humeyra Caglayan**, ECI Advisor, COST Action NQO
- 12:00 - Industry Session
  - *Technological outlook*, **Felix Bussieres**, Industry Advisor, COST Action NQO
  - *Market research study on nanoscale quantum optics*, **Thierry Robin**, Tematys
  - *High precision sensing with quantum sensors in diamond*, **Alexander Stark**, QNAMI
  - *Bringing to market superconducting single-photon detectors*, **Sander Dorenbos**, Single Quantum
- 12:45 - Panel Discussion *Perspectives for NQO & Conclusions*
  - **Mario Agio**, Chair, COST Action, NQO (Moderator)
  - **Humeyra Caglayan**, ECI Advisor, COST Action NQO
  - **Eamonn Murphy**, ESTEC, European Space Agency
  - **Rogier Verberk**, Innovation Working Group, QT Flagship
  - **Gregor Weihs**, Vice-President, Austrian Science Fund
- 13:30 - Networking Lunch

