

NQO Kick-off Workshop Program

9th April – Kolarac Foundation

8:30 – Welcome to Participants

Local Organizer – Brana Jelenkovic (Serbia)

Welcome Address – Viktor Nedovic (Serbia)

8:45 – Introduction to COST Association and COST Action NQO

Action Chair – Mario Agio (Germany and Italy)

Gender Balance Advisor – Irene D'Amico (United Kingdom)

Early Stage Res. Advisor – André Xuereb (Malta)

9:10 – Guest Speakers

Jelena Vuckovic (USA)

Quantum nanophotonics

Nenad Vukmirovic (Serbia)

Modeling of Nitride Nanostructure Based Classical and Non-Classical Light Emitters

Dejan Pantelic (Serbia)

Complexity of natural photonic structures

10:10 – Coffee Break

10:30 – Technical Session (WG1)

WG1 Leader – Félix Bussières (Switzerland)

Invited – Mete Atatüre (United Kingdom)

Quantum optics with quantum-dot spins and photons

Contributed – Jean-Michel Gérard (France)

Quantum optics with photonic trumpets

Contributed – Niccolò Somaschi (France)

Electrically Tunable Bright Sources of Highly Indistinguishable Single Photons

Contributed – Daniele Bajoni (Italy)

Emission of entangled photons from a silicon microring resonator.

Contributed – Ana Predojevic (Austria)

On-demand generation of photon pairs and generation of time-bin entanglement from a single quantum dot

Contributed – Andreas Engel (Switzerland)

Physics and Applications of Superconducting Nanowire Single-Photon Detectors

12:30 – Free Lunch

14:00 – Technical Session (WG2)

WG2 Leader – Walther Pfeiffer (Germany)

Invited – Christoph Lienau (Germany)

Ultrafast Coherent Charge Transfer in Solar Cells and Artificial Light Harvesting Systems: Toward Movies of Electronic Motion

Contributed – Bin Yang (France)

Cryogenic Super-Resolution Microscopy with single molecules

Contributed – Andreas Eckstein (United Kingdom)

Engineering TF-mode selective quantum frequency conversion in photonic crystal fiber

Contributed – Johannes Feist (Spain)

Transport and harvesting of excitons mediated by strong coupling

Contributed – Harald Giessen (Germany)

Ultrafast hybrid nonlinear plasmonics

Contributed – Jeremy Butet (Switzerland)

Second Harmonic Generation from Realistic Plasmonic Nanoantennas and Fano Metamolecules

16:00 – Coffee Break

16:20 – Poster Session & MC Meeting

19:30 – Get together and dinner at Aero Club

10th April – Kolarac Foundation

8:50 – Industry, Education and Training

Education and Training Adv. – Darrick Chang (Spain)

Industry Adv. – Sander Dorenbos (The Netherlands)

Invited – Val Zwiller (The Netherlands)

Quantum Optics with Nanowires

Invited – Bert Offrein (Switzerland)

Photonic devices for future computing systems

10:10 – Coffee Break

10:30 – Technical Session (WG3)

WG3 Leader – Thomas Durt (France)

Invited – Paola Cappellaro (USA and Italy)

Quantum Spectrometers

Contributed – Vincenzo Savona (Switzerland)

Engineering non-classical states of light and matter in automatedly optimized photonic crystal structures

Contributed – Alexander Kromka (Czech Republic)

Carbon synthesis in Prague and incorporation of optically active silicon colour centres into diamond thin films

Contributed – Lorenzo Rosa (Italy and Australia)

Room temperature Single Photon Sources in Silicon Carbide

Contributed – Niels Israelsen (Denmark)

Controlled Routing of Single Plasmons at the Nanoscale

Contributed – Elke Neu (Germany and Switzerland)

A low-loss, broadband dielectric antenna enabling highly efficient photon collection from a coherent NV center spin in diamond

12:30 – Free Lunch

14:00 – Technical Session (WG4)

WG4 Leader – Peter Rabl (Austria)

Invited – Giovanna Morigi (Germany)

Nano-friction in cavity quantum electrodynamics

Contributed – Tommy Hakala (Finland)

Coupling effects in plasmonic nanoparticle arrays: the weak and the strong coupling regime and the effects of spin-orbit coupling

Contributed – Francesco Intravia (Germany)

Dynamics of a quantum emitter in nonlocal dissipative periodic structures

Contributed – Nick Schilder (France)

Role of collective superradiant modes on the spontaneous emission in a dense cloud of atoms

Contributed – Philipp Schneeweiss (Austria)

Optical diode based on the chirality of guided photons

Contributed – André Xuereb (Malta)

Optomechanics, a platform for nanoscale quantum optics

16:00 – Closing Remarks