

1st International LOEWE-Scalable Molecular Quantum Bits (SMolBits) Workshop (Online via Zoom)

November 12 - 13, 2020

Thursday, November 12

12:00 -12:10 Opening

Session 1: Single-photon emitters

Chair: Johann Peter Reithmaier

12:10 -12:55 Michel Orrit, Leiden University, Netherlands
Cryogenic Single-Molecule Spectroscopy

12:55 -13:40 Stephan Götzinger, MPL, Erlangen, Germany
*Single molecules as a basic resource for the generation and
manipulation of single photons*

Break 13:40 – 14:10 (Private chat with speakers)

Session 2: Single molecule in cavities and devices

Chair: Mohamed Benyoucef

14:10 -14:55 Jörg Enderlein, Göttingen, Germany
*Single molecule fluorescence in nanocavities and close to plasmonic
surfaces*

14:55 -15:40 Costanza Toninelli, Florence, Italy
Integrated single-molecule devices

Break 15:40 – 16:15 (Private chat with speakers)

Session 3: Joint Physics - LOEWE (SMolBits) Colloquium

Chair: Burkhard Fricke

16:15 -17:15 Rainer Blatt, Universität Innsbruck, Austria
The Quantum Way of Doing Computations

Friday, November 13

Session 1: Quantum optics with single molecule

Chair: Christiane Koch

- 09:00 - 09:45 Wolfgang Wernsdorfer, KIT, Germany
Operation quantum states in single molecules
- 09:45 -10:30 Alex Gaita, Valencia, Spain
Quantum coherent spin-electric control in molecular nanomagnets
- 10:30 - 11:15 Stefan Willitsch, Basel, Switzerland
Quantum technologies with trapped molecular ions

Break 11:15 – 11:45 (Private chat with speakers)

Session 2: Cold atoms in cavities and fluorescence microscopy

Chair: Rudolf Pietschnig

- 11:45 -12:30 Guido Pupillo, Strasbourg, France
Theory of collective cavity dynamics for cold chemistry and materials science
- 12:30 -13:15 Rainer Erdmann, PicoQuant, Berlin, Germany
Mapping Single Emitters in Confocal Fluorescence Microscopy
- 13:15 -13:30 Concluding Remarks

Contact:

For further information and questions, please contact:

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