

## Symposium Ultrafast Quantum Nano-Optics (SYQO)

jointly organized by  
the Quantum Optics and Photonics Division (Q),  
the Molecular Physics Division (MO), and  
the Atomic Physics Division (A)

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The recent years have witnessed an increasing interest in quantum phenomena in complex systems operating at room temperature. A variety of them are topics of intense investigation, ranging from, e.g., chromophores in nanoclusters, to quantum emitters coupled to plasmonic resonators. All of these studies highlight how quantum physics is at work when coherence times are extremely short. This requires an interdisciplinary approach for advancing theoretical methods, in particular time-dependent ab-initio techniques, and experimental techniques, such as multidimensional electronic spectroscopies.

The symposium focuses on the latest advances in the field and provides to the DPG community an opportunity to discuss the intriguing interplay between quantum optics, ultrafast spectroscopy and nanoscience.

### Overview of Invited Talks and Sessions

(Lecture hall Paulussaal)

#### Invited Talks

SYQO 1.1	Fri	11:00–11:30	Paulussaal	<b>Coherent and incoherent dynamics of colloidal plexcitonic nanohybrids</b> — ●ELISABETTA COLLINI
SYQO 1.2	Fri	11:30–12:00	Paulussaal	<b>Dissipative Many-Body Dynamics in Atomic Subwavelength Arrays in Free Space</b> — ●STEFAN OSTERMANN
SYQO 1.3	Fri	12:00–12:30	Paulussaal	<b>Quantum dot sources: efficiency, entanglement, and correlations.</b> — ●ANA PREDOJEVIĆ

#### Sessions

SYQO 1.1–1.5	Fri	11:00–13:00	Paulussaal	<b>Ultrafast Quantum Nano-Optics</b>
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