

Nonlinear Spectroscopy meets Quantum Optics

October 8

6:00 pm to 8:00 pm Registration and Welcome Reception

October 9

8:45 am to 9:00 am Welcome Address Dr. Carsten Dose, Managing Director FRIAS and Introductory Remarks

9:00 am to 9:40 am **Christian Roos**, Innsbruck: *Engineering quasi-particles in a quantum many-body system of trapped ions*

9:40 am to 10:20 am **Shaul Mukamel**, Irvine: *Nonlinear Spectroscopy with Quantum Light and X-ray Photons*

10:20 am to 11:00 am Coffee Break

11:00 am to 11:40 am **Theodore Goodson III**, Michigan: *Quantum Entangled Photon Spectroscopy In Organic Molecules*

11:40 am to 12:20 pm **Mackillo Kira**, Marburg: *Illuminating many-body states with quantum-optical spectroscopy*

12:20 pm to 2:20 pm Lunch Break

2:20 pm to 3:00 pm **Ferdinand Schmidt-Kaler**, Mainz: *Non-equilibrium and non-linear physics with trapped ion crystals*

3:00 pm to 3:40 pm **David Gross**, Freiburg: *Regularized estimators for multi-dimensional spectroscopy*

3:40 pm to 4:20 pm Coffee Break

4:20 pm to 5:00 pm **Spiros Skourtis**, FRIAS: *tba*

5:00 pm to 5:20 pm **Daniel Barredo**, Paris: *Excitation transfer dynamics in systems of individual Rydberg atoms*

5:20 pm to 7:00 pm **Poster Session**

7:00 pm **Conference Dinner**

October 10

9:00 am to 9:40 am	Tobias Brixner , Würzburg: <i>2D Nanoscopy reveals Anderson light localization</i>
9:40 am to 10:20 am	Marten Richter , Berlin: <i>Theory of coherent multidimensional spectroscopy combined with nanooptics</i>
10:20 am to 11:00 am	Coffee Break
11:00 am to 11:40 am	Stefan Kuhr , Strathclyde: <i>Towards single-site-resolved detection of fermions in an optical lattice</i>
11:40 am to 12:20 pm	Tobias Schätz , Freiburg: <i>Non-linear impact of topological defects in Coulomb crystals of trapped ions</i>
12:20 pm to 2:20 pm	Lunch Break
2:20 pm to 3:00 pm	Vahid Sandoghdar , Erlangen: <i>Cavity-free nonlinear optics with few photons</i>
3:00 pm to 3:40 pm	Shannon Whitlock , Heidelberg: <i>Simulating dipolar energy transport with giant atoms</i>
3:40 pm to 4:20 pm	Coffee Break
4:20 pm to 5:00 pm	Michael Raymer , Oregon: <i>Ultrafast 2D Fluorescence Spectroscopy using Spectrally Entangled Photon Pairs</i>
5:00 pm to 5:20 pm	Claude Fabre , Paris: <i>Spectroscopy using quantum states of light: the example of two-photon two-atom excitation</i>