



Conference Schedule 2022

Time	Monday, 4 July	Tuesday, 5 July	Wednesday, 6 July	Time
8:00		Women* in QST Breakfast A casual networking breakfast for women* working in QST		
9:00		Christian Roos University of Innsbruck Quantum simulations with one- and two-dimensional ion crystals	Hotel Checkout	9:00
9:30		Sebastian Blatt LMU München Q-Technology, Q-Simulations, and Precision Measurements with Ultracold Strontium	Björn Sbierski LMU München Pseudo-Majoranas for Spin-1/2: Advanced Diagrammatics and Applications	9:30
10:00		Zohreh Davoudi Univ. of Maryland Gauge theories, trapped ions, and NISQ-era simulation strategies	Timon Hilker MPQ Garching Quantum gas microscopy of antiferromagnets with and without doping	10:00
10:30		Coffee Break	Coffee Break	10:30
11:00		Eugenia Colafranceschi Univ. Nottingham Modelling black hole horizons via random tensor networks	Norbert Lemke OHB System AG Title TBA	11:00
11:30		Christian Degen ETH Zürich Quantum Sensors in Diamond: Technology and Applications	Tim van Leent LMU München Quantum communication experiments with neutral single-atoms	11:30
12:00	Lunch (until 13:15)	Christian Back TU München High resolution spinwave imaging	PhD Prize Ceremony & Presentations Anabelle Bohrdt & Benjamin Merkel	12:00
12:30		Lunch	Lunch	12:30
13:20	Welcome			
13:30	Sevag Gharibian Univ. of Paderborn Title TBA			
14:00	Michael Wolf TU München Squaring the circle - some quantum consequences	Ana Predojević Stockholm University Quantum light sources: entanglement generation in semiconductor photonic structures	Martin B. Plenio Ulm University Quantum Sensing at the Nanoscale	14:00
14:30	David DeMille Univ. of Chicago Probing PeV-scale physics with AMO techniques	Andreas Reiserer MPQ Garching Erbium dopants - a novel platform for quantum networks	Menno Poot TU München Towards a monolithically-integrated on-chip quantum optics platform	14:30
15:00	Stephan Dürr MPQ Garching The Chase for High Efficiency in Optical Quantum Gates	Johannes Knolle TU München Anomalous Quantum Oscillations in Topological Materials	Steffen Glaser TU München Optimal control, tomography and visualization of quantum information processing	15:00
15:30	Conference Photo / Coffee Break	Coffee Break	Coffee Break	15:30
16:00	Senthil Todadri MIT The dipolar Bose Hubbard model	Marc Janoschek University of Zurich Topological magnon band structure of emergent Landau levels in a skyrmion lattice	Departure	16:30
16:30	Dmitri Efetov LMU München Plethora of Many-Body Ground States in Magic Angle Twisted Bilayer Graphene	Ángela Capel Cuevas Univ. of Tübingen When does a quantum dissipative evolution mix rapidly?		
17:00	Natalie Klco CalTech Quantum fields: quantum simulating (with) an entangled fabric	Janis Nötzel TU München Quantum Technology: Perspectives in Classical Networking		
17:30	Tim Langen Univ. of Stuttgart Supersolidity in dipolar Bose-Einstein condensates	Tanja Kubes FU Berlin Diversity / Equity Social Inscriptions in Science and Technology		
18:30	Dinner	Dinner		
20:00 - 21:00	Poster Session 1	Poster Session 2		

- Research Unit A - **Quantum Information Theory**
- Research Unit B - **Quantum Simulation**
- Research Unit C - **Quantum Computing**
- Research Unit D - **Quantum Communication**
- Research Unit E - **Quantum Metrology and Sensing**
- Research Unit F - **Quantum Matter**
- Research Unit G - **Explorative Research**
- Special Sessions**

*We use an inclusive definition of "woman" and we welcome trans women and non-binary people who are significantly female-identified.