

Annual Meeting 2022 - Schedule

TRR 306

QuCoLiMa



Quantum Cooperativity of Light and Matter

07.10.22

Tuesday, 11.10.2022	
17:00 - 19:00	Early Registration
from 19:00	Welcome Dinner
20:00 - 22:00	Late Registration

Wednesday, 12.10.2022			
Time	Project	Title	Project leader(s)
from 07:00	Breakfast		Chair of following session: Schmidt
08:20		Welcome	von Zanthier / Schmidt
08:30	A01	Cooperative light emission and spatio-temporal photon correlations from trapped ion arrays	von Zanthier / Schmidt-Kaler
09:00	A05	Cooperative effects of a defined number of organic molecules embedded in a dielectric antenna	Götzinger
09:20	A06	Tailor-made beyond-one-excitation quantum states for quantum information and communication	van Look
09:40	B01	Collective quantum dynamics of structural- and spin-defects in ion crystals	Schmidt-Kaler / Morigi
10:00	D01	Cooperative effects in coupled quantum emitter systems	Genes
10:20	Coffee Break		Chair of following session: Schmidt-Kaler
10:50	D02	Spatio-temporal structures in interacting spin systems	Morigi
11:10	D03	Competing interactions in strongly correlated light-matter assemblies	Schmidt
11:30	Extern	Quantum thermodynamics in open quantum systems	Géraldine Haack (Université de Genève)
12:30	Lunch		Chair of following session: Palfy-Buß
14:20	C02	Light induced correlations in dense atomic media	Windpassinger / Schmidt
14:40	C03	Mechanical and chemical control of single and multiphoton emission	Basché / Jung
15:10	C01	One-dimensional photon-mediated cooperativity of quantum emitters	Sandoghdar
15:30	Research Data Management		
16:30	Coffee Break / Individual Discussions		Chair of following talk: Morigi
17:00	Intro	Ab-initio modelling for molecular polaritons with and without an external magnetic field	Stella Stopkowicz (UdS)
17:30	General Assembly (Project Leaders only)		von Zanthier / Schmidt
19:00	Dinner		
20:00	Poster Session		

Thursday, 13.10.2022			
Time	Project	Title	Project leader(s)
from 07:00	Breakfast		Chair of following session: Becher
08:30	B03	Point defects in silicon carbide: Towards a platform for the coupling of light, spin and mechanics	Weber / Neu-Ruffing / Bockstedte
08:50	B05	Optomechanical arrays	Viola Kusminskiy
09:10	B02	Levitated ferrimagnetic particles in hollow-core photonic crystal fibres	Joly / Russell
09:30	C04	X-ray photonic structures for control of cooperative emission from resonant nuclei	Pálffy-Buß / Röhlberger / von Zanthier
10:00	C05	Quantum cooperative chiral metasurfaces for producing nonclassical light	Krstić / Chekhova
10:30	Coffee Break / Group photo		Chair of following session: Genes
11:00	D04	Synchronising quantum spins with long-range dissipation	Marino
11:20	D05	Quantum Cooperativity and Synchronization	Marquardt
11:40	D06	Entangling collective behavior of quantum materials and quantum light	Eckstein
12:00	A02	Generation of photonic cluster states from color center-cavity systems	Becher
12:20	A04	Spatio-temporal correlations of electrons emitted from femtosecond laser-driven needle sources	Hommelhoff
12:40	Lunch		
14:00 - 17:00	Excursion including Coffee & Cake		Chair of following session: Schmidt
17:00	Extern	Rydberg atoms as new Frontier in Quantum Magnetism	Andreas Läuchli (Paul Scherrer Institut)
18:00	Diversity talk	QuCoLiMa - why asking for only part of the cake?	Karen Böhme
19:00	Dinner		
20:00	Individual Discussions		

Friday, 14.10.2022			
Time	Project	Title	Project leader(s)
from 07:00	Breakfast		Chair of following session: Marino
08:30	A03	Correlated x-ray photons for incoherent diffraction imaging	Röhlberger / von Zanthier
08:50	B04	Optomechanical lasing mechanisms in cold atoms	Eschner
09:10	Extern	What chiral molecules can teach us about quantum control	Christiane Koch (FU Berlin)
10:10	Coffee Break		Chair of following session: Schmidt-Kaler/von Zanthier
10:50	Extern	Dissipative time crystals in an atom-cavity system	Andreas Hemmerich (Universität Hamburg)
11:50	Z02	Quantum simulation methods for cooperative effects in strongly correlated light-matter systems	Hartmann / Wilhelm-Mauch
12:30	Closing / Lunch		
14:00	Bus Departure to Erlangen from Hotel		