

SFB/TRR 142-Workshop
"Tailored Non-linear Photonics"
28th/29th November 2022

Venue "Hotel Schnitterhof", Bad Sassendorf



Monday, 28th November 2022

Time	Name	Topic	Chairperson
08:00-09:00 Accreditation			
09:00-09:15	Chistine Silberhorn	Welcome - Agenda of the day - Brief report TRR 142	
09:15-10:00	Christine Silberhorn	Tutorial: Quantum Optics	
10:00-10:15	Stefan Grisard	A2 Degenerate multi-wave mixing beyond the perturbative regime: Coherent control of trions in a semiconductor quantum dot ensemble	Claudia Ruppert
10:15-10:30	Laura Bollmers, Silia Babel	B07, C11, C08 Fabrication and Application of LNOI devices for quantum photonics	
10:30-11:00 Coffee Break			
11:00-12:00	Christopher Gies	Quantum technology applications for semiconductor-cavity-QED systems in the NISQ era	Stefan Schumacher
12:00-13:30 Lunch			
13:30-14:30		Poster Session Part 1 - First Group of Presenters	Laura Padberg
14:30-15:30		Poster Session Part 2 - Second Group of Presenters	
15:30-15:45 Coffee Break			
15:45-16:00	Christian Golla	B09 Multi-Mode Fano Resonance for Enhanced Third Harmonic Generation in Silicon Metasurfaces	Tobias Henksmeier
16:00-16:15	Ruixin Zuo, Christian Beckmann, Filippo Velli	A10 Towards strong-field effects of quasi two-dimensional excitons	
16:15-16:30	Andreas Farenbruch	A11 Multiphoton spectroscopy on dark and bright excitons in Cu2O	

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Time	Name	Topic	Chairperson
08:00-09:00		Breakfast	
09:00-09:05	Christine Silberhorn	Welcome back - Agenda of the day	
09:05-09:20	Jan Sperling	C10 Physical exponential quantum speed-up powered by entanglement	Polina Sharapova
09:20-09:35	Agnieszka Kozub	A11, B07 Self-trapped excitons and their nonlinear susceptibilities in lithium niobate	
09:35-09:50	Adriana Bocchini	A11, B07 Intrinsic point defects in KTP-family materials: Optical and electrochemical implications	
09:50-10:05	Ankita Khanda	A09 Three-photon state generation with on-chip pump suppression in topological waveguides	
10:05-10:35		Coffee Break	
10:35-11:35	Armando Rastelli	Semiconductor Quantum Dots as sources and hosts of quantum information	Klaus Jöns
11:35-13:05		Lunchbreak	
13:05-13:20	Lukas Hanschke	C09, B06 Stimulated generation of indistinguishable single photons	Klaus Jöns
13:20-13:35	David Bauch, Dustin Siebert	C09, B06 Generation of indistinguishable and entangled photons at telecom frequencies using tailored cavity designs	
13:35-14:00	Christine Silberhorn	Award: Posters of the day - Presentation Concluding remarks	
14:00		End of the workshop	