

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	
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09:15-10:00	Christine Silberhorn		Tutorial: Quantum Optics	
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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	
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11:00-12:00	Christopher Gies		Quantum technology applications for semiconductor-cavity-QED systems in the NISQ era	Stefan Schumacher
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12:00-13:30			Lunch	
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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	
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15:45-16:00	Christian Golla	B09	Multi-Mode Fano Resonance for Enhanced Third Harmonic Generation in Silicon Metasurfaces	Tobias Hensmeier
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 Cu ₂ O	

16:30-17:00			Snacks	
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from 17:00			Social Event: Christmas Market	
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Leaving for Soest by train. Back to the hotel on one's own. No dinner at the hotel.

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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	
09:50-10:20		Coffee Break - CHECK OUT OF YOUR ROOMS -	
10:20-11:20	Armando Rastelli	Semiconductor Quantum Dots as sources and hosts of quantum information	Klaus Jöns
11:20-12:50		Lunch	
12:50-13:05	Ankita Khanda	Three-photon state generation with on-chip pump suppression in topological waveguides	Klaus Jöns
13:05-13:20	Lukas Hanschke	C09, B06 Stimulated generation of indistinguishable single photons	
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	

Any questions, please contact:
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