

**SFB/TRR 142-Workshop**

**"Tailored Non-linear Photonics"**

**6th/7th November 2023**

Venue "Hotel Schnitterhof", Bad Sassendorf

Monday, 6th November 2023



| Time        | Name | Topic         | Chair |
|-------------|------|---------------|-------|
| 08:00-09:00 |      | Accreditation |       |

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|-------------|---------------------|--|--|--|
| 09:00-09:15 | Chistine Silberhorn |  | Welcome - Agenda of the day - Report TRR 142 |  |
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| 09:15-10:15 | Christoph Lange |  | Tutorial: Phase and amplitude-resolved subcycle spectroscopy | Christine Silberhorn |
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| 10:15-10:45 | Coffee Break |  |  |  |
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| 10:45-11:00 | Ioannis Caltzidis | C08 | Integration of III/V quantum dots on LNOI waveguides - a hybrid approach   | Dirk Reuter |
| 11:00-11:15 | Karl Schiller     | A8  | Bechmarking a time-resolved momentum microscopy setup with bulk WS2 to study interlayer excitons in van der Waals heterostructures |             |

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| 11:15-12:15 | Jon Finley |  | 2D-Materials for Quantum Photonics, Sensing and Simulation | Dirk Reuter |
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| 12:15-13:45 | Lunch |  |  |  |
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| 13:45-14:00 | Nikita Siverin | A11 | Confocal SHG and pump-probe microscopy of 2D materials and perovskites | Thomas Zentgraf |
| 14:00-14:15 | René Geromel   | B09 | Dispersion control with integrated plasmonic metasurfaces              |                 |
| 14:15-14:30 | Artur Trifonov | A2  | Photon echoes in the ensemble of singly charged QDs                    |                 |

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| 14:30-15:30 | Maria Chekhova |  | Quantum state reconstruction with a parametric amplifier | Thomas Zentgraf |
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| 15:30-15:45 | Coffee Break |  |  |  |
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| 15:45-16:00 | Alexey Sherbakov | A06           | Coherent phononics of van der Waals nanolayers                            | Marc Aßmann |
| 16:00-16:15 | Dennis Deutsch   | C09           | Preparation of droplet-etched quantum dots emitting in the optical C-band |             |
| 16:15-16:30 | Laura Padberg    | B07, C08, C11 | Fabrication of Periodically Poled Waveguides in Thin Film Lithium Niobate |             |
| 16:30-16:45 | Michael Rüsing   | B07, C08, C11 | Advanced Characterization of Periodic Poling in Thin Film Lithium Niobate |             |

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| 17:30-18:30 | Social Event (indoors) - Room: "Speicher" |  |  |  |
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| 19:00 | Dinner |  |  |  |
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Tuesday, 7th November 2023

| Time        | Name                 |  | Topic   | Chair                |
|-------------|----------------------|--|---|----------------------|
| 09:00-09:05 | Christine Silberhorn |  | Welcome back - Agenda of the day  |                      |
| 9:05-9:20   | Dennis Scharwald     | C10                                      | Evolution of Schmidt modes in cascaded nonlinear systems                | Stefan Schumacher    |
| 9:20-9:35   | Marvin Krenz         | A11, B7                                  | Exciton transfer across organic-inorganic interfaces                    |                      |
| 9:35-9:50   | Ruixin Zuo           | A10                                      | Theory for high-field phenomena and excitonic effects in semiconductors |                      |
| 9:50-10:50  | Matthias Kleinmann   |  | Simple and efficient statistical methods for quantum state tomography   |                      |
| 10:50-11:15 |                      | Coffee Break - CHECK OUT OF YOUR ROOMS - |   |                      |
| 11:15-12:15 |                      |  | Mitgliederversammlung - Room: "Speicher"                                |                      |
| 11:15-13:15 |                      |  | Poster Session 2h   | Normen Auler         |
| 13:15-14:15 |                      | Lunchbreak                               |   |                      |
| 14:15-14:30 |                      |  | Group photograph  |                      |
| 14:30-15:00 | Gerd Leuchs          |  | Maxwell equations: what can be learnt about elementary particles?       | Christine Silberhorn |
| 15:00-15:15 | Christine Silberhorn |  | Award: Posters of the day - Presentation<br>Concluding remarks          |                      |
| 15:15       |                      | End of the workshop                      |   |                      |

Any questions, please contact:  
 Dirk Waldhoff - 05251 60 2701