



OPTEXC

Invited Speaker Series

Isolating Multi-Particle Correlations in Time and Space**

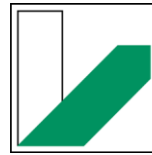
Electronic excitations are crucial in many fields of science and engineering. Time-resolved spectroscopy is widely used to detect dynamics of excited particles (electrons) and quasiparticles (e.g., excitons or plasmons). However, conventional approaches do not resolve correlations between multiple excitations, making it impossible to understand important quantum phenomena. It will be shown how new experimental methods can be used to determine multi-particle correlations, based on isolating higher (than fourth) orders of perturbation theory systematically. These orders can be separated without requiring a-priori models. Overcoming limitations of single-particle models, it is possible to quantify electronic couplings and exciton diffusion in organic and hybrid functional materials.

Date: Monday, 08th June 2026

Time: 1230 | Room: H11 (NWI)



Prof. Dr. Tobias Brixner
Universität Würzburg
Germany



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Tutorial Series

Tutorial Introduction to 2D Electronic Spectroscopy

Date: Monday, 08th June 2026

Time: 1000

Room: S35 (NWI)



Prof. Dr. Tobias Brixner
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