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## Lecture Series

## **Excited States in Conjugated Organic Materials**

## Módulo 13

Friday, 27.04. 16:00-18:00h, Room 401

Thursday, 03.05. 16:00-18:00h, Room 403

Friday, 04.05. 16:00-18:00h, Room 403

**Audience:** Postdocs, PhD students, Master students

Content: Excited States in Conjugated Molecules & Polymers: Light-matter interaction (classical/quantum-chemical approach), Electronic Transitions (ground & excited states, Hückel MO theory, selection rules, Herzberg-Teller coupling, spin-orbit coupling), chemical constitution & absorption (chainlength dependence, substitution, solvent shifts, materials design: low bandgap materials), vibronic coupling (linear & quadratic coupling, chemical constitution and vibronic coupling, line broadening), excited state deactivation. Excited States of Conjugated Materials in the Solid State: aggregation (molecular exciton model, point-dipoles vs. QC approaches, vibronic coupling in the solid state: excitons vs. excimers, modeling beyond the nearest-neighbor approximation), energy transfer / exciton dynamics

Guests are cordially invited!

Johannes Gierschner

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