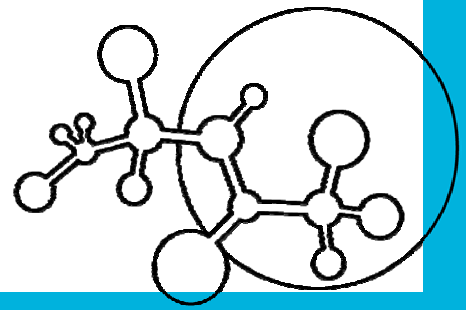




FRIAS

FREIBURG INSTITUTE FOR ADVANCED STUDIES
ALBERT -LUDWIGS -UNIVERSITÄT FREIBURG
SCHOOL OF SOFT MATTER RESEARCH



Quantum Efficiency Seminar and Colloquium

Stefan Lochrunner
Institute of Physics, Uni Rostock

Ultrafast Exciton Dynamics in Ordered and Disordered Organic Systems

In photo excited organic materials complex energy transport and electronic relaxation processes take place which have a strong influence on the performance of these materials in optoelectronic applications. Femtosecond spectroscopy provides valuable insights since it probes the primary processes initiated by the absorption of a photon and is predominantly sensitive to local effects. Our pump-probe experiments on different systems with 30 fs time resolution show that it is possible to discriminate between different relaxation scenarios and to provide absolute numbers for local mobilities. As examples the behavior of electronic excitations in microcrystalline pentacene films and dye aggregates and exciton migration in polymer matrices highly doped with dye molecules is discussed.

Date: Tuesday, July 19th, 2011 4:15 pm

Location: FRIAS Seminar Room, Albertstr. 19, Freiburg

Contact: Andreas Buchleitner, Institute of Physics, Quantum Optics and Statistics,
T +49 761 203 5929 F +49 761 203 5967 E beate.spingler@frias.uni-freiburg.de
www.physik.uni-freiburg.de

Physikalisches Institut

Albert-Ludwigs-
Universität Freiburg

