

EINLADUNG

zum Vortrag von

Prof. Dr. Peter Hamm

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über

Towards a Molecular Movie: Transient 2D-IR spectroscopy

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Dienstag, 26. Juni 2007, um 17.30 Uhr

Ort: Großer Hörsaal der Experimentalphysik, Universität Wien,
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Abstract:

We have recently developed the method of transient 2D-IR spectroscopy, i.e. the 2D-IR spectroscopy of a transient species during a photochemical reaction. 2D-IR spectroscopy carries significant structural information through the existence of crosspeaks which report on local contacts in a molecule. At the same time, it takes one picosecond to measure a 2D-IR spectrum. Transient 2D-IR spectroscopy thus uniquely combines ultrafast time resolution with significant structural resolution power. Our ultimate goal is to apply this method to study fast structural changes of peptides and proteins, such as alpha-helix folding. I will report on our ongoing efforts steps in this direction.