



# Institutskolloquium

Am Dienstag, 18. Dezember 2007 um 16:00 Uhr spricht

**Prof. Dr. Peter Hamm**

**Physikalisch Chemisches Institut der Universität Zürich**

über

**“Femtosecond IR spectroscopy to study structure, dynamics and energy flow in condensed phase systems”**

Abstract: IR spectroscopy probes the vibrational degrees of freedom of molecules. In the condensed phase, most notably in the solution phase, these vibrational degrees of freedom are affected by dissipative forces (friction) of the surrounding solvent, and it is clear that these dissipative forces may alter the properties of molecules and the outcome of chemical reactions significantly. With the help of time-resolved femtosecond IR spectroscopy, we can learn a lot about solvation dynamics, structural dynamics and energy transfer processes of condensed phase molecular systems. I will illustrate these fields of application of femtosecond IR spectroscopy on a couple of examples, ranging from studies of elementary chemical reactions to peptide folding.

**Ort: Max-Born-Saal,  
MBI, Max-Born-Str. 2a**

Prof. Dr.Th. Elsässer