Max-Born-Institut

Institutskolloquium

Am Mittwoch, **29. September 2004 um 16:00 Uhr** spricht:

Prof. Dr. Peter Hamm
Institut für Physikalische Chemie
Universität Zürich

über

"Ultrafast IR-Driven Cis-Trans Isomerization of Nitrous Acid"

The cis-trans isomerization of nitrous acid (HONO) in rare gas matrices is one of the few known photoreactions that can be triggered by IR excitation of a single vibrational quantum. The molecule is well suited as a model system to study the dynamics of chemical reactions on electronic ground state potential surfaces. High level quantum dynamic calculations indicate that the reaction could not take place in the gas phase. Hence, HONO furthermore appears to be a good candidate to examine how the condensed phase environment allows chemical reactions to occur.
Recent results of the application of femtosecond pump-probe techniques to excite the OH stretching mode of the molecule will be reported and compared with theoretical results based on a model Hamiltonian.

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

Interessenten sind herzlich eingeladen.

Prof. Dr. Th. Elsässer