

EINLADUNG

zum Vortrag von

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Watching the motion of molecules in excited states: from ethylene to retinal models and the photostability of DNA bases

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Dienstag, 28. November 2006, um 17.30 Uhr

im Großen Hörsaal des Instituts für Experimentalphysik der Universität Wien
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Abstract:

The theoretical treatment of the photodynamics of molecular systems is very challenging. One major problem is the accurate computation of excited-state surfaces, nonadiabatic couplings, conical intersections and intersection seams. In this talk the advantages of explicit surface-hopping dynamics simulations using accurate quantum chemical approaches will be discussed for several interesting cases such as the cis-trans isomerization of the polar π bond, the behavior of heteroaromatic ring systems and excited-state proton transfer. These examples show that it is possible to follow the photochemical reaction in great detail and that the reaction mechanisms may depend strongly on the initial excited state.

Der Vortrag findet im Anschluss an die Jahreshauptversammlung statt.