



Physical Sciences Seminar

Molecular Frame Photoelectron Angular Distributions (MFPADs): A sensitive access to electronic structure and dynamics

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: The body-fixed frame angular emission distributions of electrons emitted upon photoionization and decay processes (the so-called molecular frame photoelectron angular distributions, MFPADs) are known to be very sensitive probes for molecular structures. When escaping from the ion, the emitted electrons accumulate detailed information on the target and on the dynamics of a process itself, illuminating the molecular potential from within. MFPADs are given by a coherent superposition of all transition amplitudes for an emission of the electron partial continuum waves and, as a consequence, provide the most complete information, which is not accessible otherwise. Over the past two decades, our group is developing and permanently improving a method for the theoretical description of electron continuum spectrum in molecules, which is known as a single center method. It allows for accurate interpretation of angle-resolved ionization and decay processes in molecules. During this talk, I will discuss recent applications of the method to different molecular photoionization and decay processes.

Thursday, December 7, 2023 11:00am - 12:15pm

Office Bldg West / Ground floor / Heinzl Seminar Room (I21.EG.101)



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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