



# DESY Seminar

## ***Willibald Jentschke Lecture***

22 June 2007, 15:00, DESY Hörsaal

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## ***Atomic and Molecular Physics with FEL: A New Opportunity for Laboratory Astrophysics***

All what we know about the universe comes from the radiation emitted or absorbed by atoms and molecules, in neutral or ionic form, in stars or in the interstellar medium. A great part of the radiation spectrum is in a wavelength range for which very few experiments have been carried out, especially for ionic species. The availability of FEL radiation, producing intense, and well defined pulses of radiation in the few nm range offers a new window of opportunity to study ionic atomic and molecular processes which are relevant to the stellar and interstellar medium. In my lecture, I will described few of the key questions, some experimental results, and some future work that can be carried out with the FLASH facility.