Hamburg Photon Science Colloquium

FASTER THAN A CYCLE OF LIGHT

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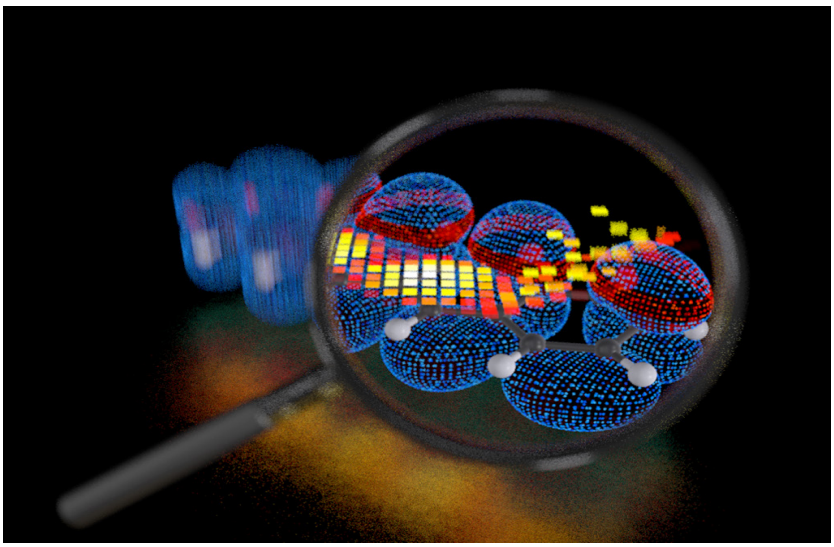
Watching a single molecule move on its intrinsic time scale has been a dream of modern nanoscience. We show how a single oscillation cycle of phase-stable infrared pulses can accelerate and recollide electrons in solids. By combining this idea with sub-angstrom spatial resolution of scanning tunnelling microscopy we manage to control the ultrafast quantum motion of individual electrons in a single orbital of one molecule. Such elementary quantum processes allow us to record first slow-motion movies of individual vibrating molecules.

FRIDAY,
11.11.2016

2:00 PM

CFEL
SEMINAR ROOMS I-III



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