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DESY AUDITORIUM (Bldg. 5)

Phil Bucksbaum

Chemical Sciences Division, Stanford PULSE Institute, SLAC, Stanford University, USA

Ultrafast motion in atoms and molecules viewed with short wavelength coherent radiation

Electrons and nuclei in excited molecules rearrange on time scales as short as a few femtoseconds. I'll review recent experiments to view electronic and nuclear motion using ultrafast pulses of short wavelength coherent radiation.

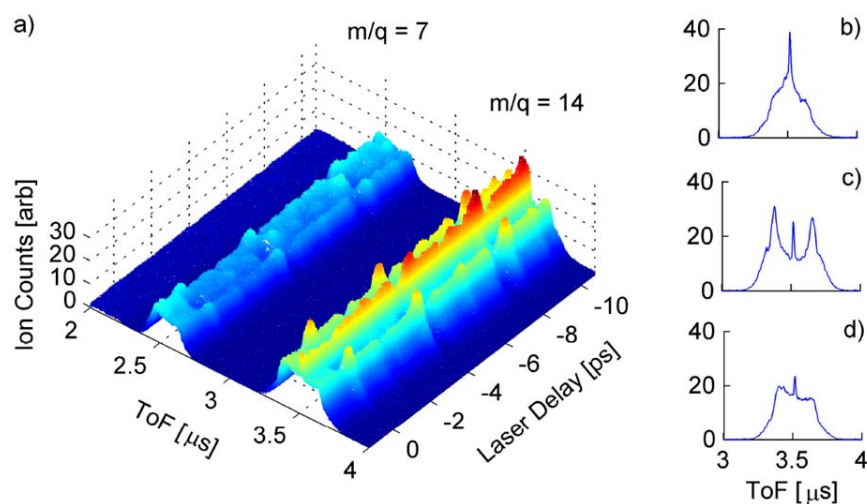


Figure:
 Quantum dispersion and revivals of a rotating nitrogen molecule, viewed by ultrafast x-ray-induced ionization and dissociation at LCLS.(from Gownia, et al., Opt. Express 18, pp.17620-30 (2010))