



**24<sup>th</sup> May 2018 - 10:00 h**

**CFEL – Building 99, seminar room II+III (ground floor)**

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**Imaging Strong-Field Induced Dynamics in C<sub>60</sub> via X-Ray Scattering**

Free-Electron Lasers (FELs) are capable of producing intense and ultrashort X-ray pulses, which enable femtosecond time-resolved diffractive imaging experiments. This allows the initiation of chemical reactions in molecules using an optical pump pulse and probing the induced changes in the nuclear structure by X-ray scattering using a delayed FEL pulse. Within this talk, results on the strong-field induced dynamics of C<sub>60</sub> molecules probed by X-ray scattering will be presented. Two experiments performed at LCLS will be discussed, the first conducted at the AMO end station with an X-ray energy of 2 keV and the second at the CXI end station with a photon energy of 7 keV.

