



Contribution ID: 441

Type: **Talk**

## **Time-resolved studies of small molecules employing coincidence detection techniques**

*Tuesday, 18 September 2018 11:45 (15 minutes)*

With the implementation of the European x-ray free electron laser a unique tool for time-resolved studies of small molecules and clusters emerges. The targeted pulse durations and photon energies will enable investigations which, firstly, involve more tightly bound K-shell electrons, and, secondly, address typical timescales of molecular decay process in the low fs-regime. By means of coincidence detections techniques as, for example, Cold Target Recoil Ion Momentum Spectroscopy (COLTRIMS) it was demonstrated in the past, that in a few special cases, the molecular time domain is already accessible in measurements using synchrotron radiation. The talk will give a brief introduction to the topic and present two examples of such time-resolved coincidence measurements.

**Primary author:** Prof. JAHNKE, Till (IKF / Frankfurt University )

**Presenter:** Prof. JAHNKE, Till (IKF / Frankfurt University )

**Session Classification:** Micro symposium 3

**Track Classification:** MS3 Novel developments in time resolved techniques