Contribution ID: 12

Data analysis of photoelectrons from high-intensity x-ray free electron laser pulses

FLASH and European XFEL are both X-ray free-electron laser facilities where ultra-short X-ray pulses are produced using the SASE (Self Amplified Spontaneous Emission) process. One of the key differences between these facilities is the amount of X-ray pulses produced, and therefore the data recorded, being at least one order of magnitude higher for the EuXFEL. We have developed a flexible framework (EXtra-metro) to cope with this amount of data being able to analyze it in real time using an event-driven pipeline. You will be testing the implementation of a library developed for the HEXTOF (high energy X-ray time of flight) momentum photoelectron spectrometer at FLASH within the EXtra-metro framework.

Field

B2: Data processing (software-oriented)

DESY Place

Hamburg

DESY Division

other

DESY Group

European XFEL

Special Qualifications:

Good programming skills (Python) and experience with Linux

Primary authors: DOBLAS JIMENEZ, David (Eur.XFEL (European XFEL)); IZQUIERDO, Manuel (Eur.XFEL (European XFEL))