Contribution ID: **13** Type: **On-site project**

Laser-based commissioning of a momentum microscope

Description: The purpose of this project is to set up a laser beam path at the SXP instrument to commission the momentum microscope in combination with the laser in-coupling unit.
To this end, the stability and focus properties of the laser beam should be characterized using an alignment laser and CCD cameras. The beam properties of the optical reflectivity of the sample will also be investigated. Once accomplished, it is envisioned to install a laser pulse compression setup reducing the pulse length of our fiber-laser amplifier system from about 200fs to the sub-40fs level. These laser pulses are then supposed to be used for generating the first electron spectra with the momentum microscope.

Field

A5: Lasers and optics (methodology oriented)

DESY Place

Hamburg

DESY Division

other

DESY Group

European XFEL

Special Qualifications:

Interest in femtosecond laser systems and laser beam alignment

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