

Imaging ultrafast shock waves propagated in Si wavers after optical laser pump using streaking diffraction signals

To develop new schemes for ultrafast laser manufacturing it is key to understand the temporal deformations in materials when illuminated by femtosecond optical lasers. To understand these first instances, the development of new techniques is crucial to retrieve the change in materials shortly after the laser impact. Several femtosecond optical laser pump - X-ray probe experiment have been performed at the MID instrument of European XFEL using different kinds of X-ray imaging techniques. During this summer project, the student will investigate new tools to analyze the pump-probe signals collected in experiments at MID. The student will learn about techniques to analyses the already collected data and develop new tools in collaboration with members of the MID team and external collaborations.

Group

XFEL_E1_MID

Project Category

A4. Development of experimental techniques

Special Qualifications

DESY Site

Hamburg

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