Contribution ID: **42** Type: **not specified**

Realtime observation of ultrafast dynamics in nano structured samples and 2D materials

Ultrafast dynamics in nano structured samples and 2D materials are of special interest in the fields of energy conversion, semiconductor and quantum technologies. For instance, during the relaxation of a light-induced plasmon oscillation, free electrons can be injected to an adjacent semiconductor for efficient charge generation. In this project, you will use a femtosecond laser and perform transient absorption spectroscopy measurements in order to unravel the mechanisms underlying ultrafast processes in nanosized systems. Your work will include the development of the optical setup, the measurement and the analysis of the experimental data obtained using the unique light sources developed by the CFEL-ATTO group.

Field

A5: Lasers and optics (methodology oriented)

DESY Place

Hamburg

DESY Division

FS

DESY Group

FS-ATTO

Special Qualifications:

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