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X-ray optics through additive manufacturing

Innovative X-ray optics paves the way for cutting-edge imaging techniques. Designing and fabricating optical elements requires high precision and careful modeling. Novel additive manufacturing techniques such as 3D printing based on two-photon polymerization enable quick and flexible manufacturing of complex-shaped optics. Offered design freedom helps create various optics and waveguides, allowing for achromatic focusing and X-ray guiding.

The student will work on:
- Designing and modeling optical elements through scripting
- Printing the microstructures in the cleanroom environment
- Testing the x-ray optical elements in the laboratory X-ray setup

Field

A4: Development of experimental techniques (methodology oriented)

DESY Place

Hamburg

DESY Division

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Special Qualifications:

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