Contribution ID: **59** Type: **not specified**

Multi-beam X-ray Ptychography Development

Ptychography is a robust computational imaging method for phase retrieval. Our group is currently expanding this method with multi-beam to address the compromise between high resolution and a large field of view of the sample. We have already demonstrated the efficiency of this method, but there are still many open questions to discover, such as the upper limit of the number of probes, the lowest requirement of overlapping rates, etc.
Through this project, students will gain knowledge about multi-beam Ptychography (MBP) experiment setup, dataset simulation, and reconstruction. They will explore the dataset from experiments to analyze how much efficiency can be improved and perform numerical studies on MBP.

Field

A4: Development of experimental techniques (methodology oriented)

DESY Place

Hamburg

DESY Division

FS

DESY Group

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Special Qualifications:

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