

Characterization of the first High-Z AGIPD detector prototypes

The AGIPD hybrid pixel detector was developed specifically for the unique beam structure of EuXFEL, and has been in operation with silicon sensors since 2017, enabling several successful user experiments. Now, in order to enable experiments with higher X-ray energies at EuXFEL, DESY has started the development of AGIPD detector prototypes using high atomic number (High-Z) sensors of different compound semiconductor materials. These devices will be ready for characterization and testing by the first semester of 2024. The student will participate in the experiments with the different sensor materials using the X-ray generator and sealed sources, which will then require detailed analysis and comparison of their performances before their final test in the EuXFEL experiments.

Group

FS-DS

Project Category

A4. Development of experimental techniques

Special Qualifications

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