

Detector development at the Swiss Light Source

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The detector development group of the Swiss Light Source at the Paul Scherrer Institut in Switzerland is involved in several X-ray detector development projects covering single photon counting detectors for applications at synchrotrons and charge integrating detector systems for XFELs.

In the presentation the functional principles of these detectors will be explained and then the focus will be put on Eiger a 75 micron single photon counting hybrid pixel detector system with frame rates up to 24kHz and Gotthard a charge integrating microstrip system with a 1 Mhz frame rate for XFEL applications. Performance parameters and characterisation results will be shown.