The detector group at the Swiss Light Source (SLS) is currently involved in several detector development projects both for synchrotrons and XFELs. Jungfrau is a charge integrating detector with a 75x75 μm2 pixel size, dynamic gain switching, a noise of about 120 electrons and a dynamic range of $10^4$ photons per pixel and image. The detector is developed for SwissFEL. However, with a frame rate of 1-2 kHz and a data quality similar to single photon counting detectors, it is also an excellent detector for a high photon rate applications at synchrotrons. Initially we plan a 4M pixel detector with modules having about 500k. Mönch is also a charge integrating detector with a pixel size of 25 μm. It is currently in a research state, we have first prototypes and work on defining larger systems. Since the possibility of interpolating between neighboring pixels allows a micrometric resolution the main application is high resolution x-ray imaging both at synchrotrons and with x-ray tubes. Eiger is a single photon counting pixel detector with a pixel size of 75x75 μm2 and a focus on high frame rates. We are currently working on the assembly of a 9M pixel detector. The status of the systems, first results and the plans for the future will be shown.

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