

Plans and Requirements for 2D Soft X-ray Detection at BESSY II

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Two scanning transmission x-ray microscopes—MAXYMUS and MYSTIIC—are currently operated at undulator beamlines of BESSY II. Initial demonstrations of soft x-ray ptychography were previously conducted at MAXYMUS, successfully overcoming the resolution limits of conventional soft x-ray optics. However, these efforts were constrained by the limitations of 2D soft x-ray detector technology available at the time.

In this contribution, we present our plans to reestablish soft x-ray ptychography at BESSY II, with particular emphasis on the requirements, challenges, and opportunities associated with next-generation 2D soft x-ray detectors.

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