**The high-resolution synchrotron-based imaging stations at the BAMline (BESSY II) and TopoTomo (ANKA)**

Paper 7078-32
Time: **2:15 PM - 2:35 PM**
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In this presentation we introduce the high resolution imaging stations BAMline and TopoTomo at the German synchrotron facilities BESSY and ANKA. Both beamlines work with moderate photon flux density compared to other 3rd-generation sources. The approaches to optimize the efficiency of these imaging facilities include a sophisticated detector concept, the use of X-rays optics, imaging with a broad energy bandwidth and the development of dedicated scintillating single crystals. The combination of these approaches leads to strong performance in terms of resolution and image acquisition speed. Various applications from materials research and life science underline the high potential of both facilities.