

Speed Poster: Development of superconducting undulators at ANKA

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Superconducting undulators (SCUs) have the potential to reach higher brilliance and flux with respect to the state of the art permanent magnet insertion devices. ANKA is collaborating with the industrial partner Babcock Noell GmbH (BNG) to realize NbTi conduction cooled planar devices for low emittance light sources, and is developing the instrumentation to characterize the magnetic field properties and to measure the beam heat load to a cold bore needed for the cryogenic design of SCUs. We present here: the most recent results obtained within the ANKA-BNG collaboration, the progress achieved in the development of the instrumentation, and the in house studies on the application of high temperature superconducting (HTS) tape to the SCU technology.

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