MT25 Conference 2017 - Timetable, Abstracts, Orals and Posters



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Full Scale Conduction Cooled Superconducting Undulator Coils – Training, Stability and Thermal Behavior

Thursday 31 August 2017 13:45 (1h 45m)

Since several years the Institute for Beam Physics and Technology (IBPT) of the Karlsruhe Institute of Technology (KIT) is collaborating with its industrial partner Babcock Noell GmbH (BNG) in a R&D program on superconducting undulators (SCUs). At present the collaboration is primarily working on a SCU with a period length of 20 mm (SCU20). This device is foreseen to be installed at ANKA, the test facility and synchrotron radiation source, run by the IBPT. The 1.5 m long undulator coils have been tested in a horizontal, conduction - cooled measurement setup. This contribution describes the training, the stability and the thermal behavior of the coils.

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