

Tuesday, 18th October 2016, 17:00 (Tea/Coffee at 16:45)
Campus Schenefeld, main building (XHQ) room E1.173

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Development of SR and FEL SCUs at the APS

Development of superconducting undulator (SCU) technology continues at the Advanced Photon Source (APS). Experience of building and successful operation of the first short-length, 16-mm period length superconducting undulator SCU0 paved a way for a 1.1-m long, 18-mm period device, SCU18-1, which is in operation since May 2015. The APS SCU team has also built and tested a 1.5-m long, 21-mm period undulator as a part of LCLS SCU R&D program aiming at demonstration of SCU technology availability for free electron lasers. This undulator successfully achieved all the requirements including a phase error well below required 5° RMS. APS SCU team has recently completed and installed at the APS storage ring one more 1.1-m long, 18-mm period length undulator SCU18-2 that is replacing the SCU0. A novel helical SCU for the APS is currently under development with the goal of its installation by the end of the next year.

Host: Joachim Pflüger / Karen Appel