

Development of high-repetition rate XUV lasers for storage-ring experiments

Tuesday, 20 September 2016 09:50 (25 minutes)

The talk will report on the latest achievements in high repetition rate table-top XUV sources. These devices, based on high harmonic generation of femtosecond fiber lasers, now deliver up to 1 mW ($\sim 10^{14}$ photons/s) and 26.6 eV. The concept for an XUV source and beam delivery to be first used for Photoionization experiments at CRYRING will be presented. This instrument will be portable and can, in principle, be coupled to most of the storage rings and ion traps of the future FAIR facility. It will enable seminal studies on highly-charged ions including pump-probe experiments on femtosecond time scales.

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