

PHYSICS AND ASTRONOMY SEMINAR

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“Accelerator systems development of the Facility for Antiprotons and Ion Research – FAIR”

Abstract

The facility for antiproton and ion research FAIR will produce secondary beams of unprecedented intensities. In order to produce such intense secondary beams and to provide the according primary beams, FAIR will explore the intensity frontier of heavy ion accelerators. The main driver accelerators of FAIR will be the synchrotrons SIS18 and SIS100. The synchrotrons will be provided with ion beams by the Universal Linear Accelerator (UNILAC), which is presently accelerates the highest intensities of heavy ion beams. In order to produce the most intense rare isotope beams (RIB) at highest energies, a unique superconducting fragment