

Septum concepts, technologies and prototyping for FCC-hh injection and extraction

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Due to their limitations, existing hardware solutions of the extraction septa will not be sufficient to achieve the required performance for the extraction from the FCC-hh ring. A few concepts will be reviewed and a new solution is proposed to use a passive superconducting shield and persistent eddy currents to create a field-free region within a strong magnetic field. A project to study, design and construct a prototype device in collaboration with Wigner Research Centre for Physics (Budapest) will be presented.

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