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Status of the SuShi septum project

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For the extraction of the proton beam from the FCC-hh ring with a compact system, a septum magnet with a magnetic field of at least 3 Tesla is desired. In one of the proposals this device would be realized by the combination of a passive superconducting shield and a dedicated special magnet based on the canted cosine theta concept. After the encouraging tests with different shield prototypes a project has been launched to design and construct a fully fledged small-scale demonstrator prototype. The talk will present the status of the project, including the mechanical design and finite-element simulations.

Authors: NOVAK, Martin Istvan; Dr BARNA, Daniel (Wigner Research Centre for Physics); ATANASOV, Miroslav Georgiev (CERN); BORBURGH, Jan (CERN); KIRBY, Glyn (CERN)

Presenter: NOVAK, Martin Istvan

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