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NuSTORM accelerator challenges and opportunities

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The nuSTORM facility uses a stored muon beam to generate a neutrino source. Muons are captured and stored in a storage ring using stochastic injection. The facility will aim to measure neutrino-nucleus scattering cross sections with uniquely well-characterised neutrino beams; to facilitate the search for sterile neutrino and other Beyond Standard Model processes with exquisite sensitivity; and to provide a muon source that makes an excellent technology test-bed required for the development of muon beams capable of serving as a multi-TeV collider. In this paper we describe the latest status of the development of nuSTORM, the R&D needs, and the potential for nuSTORM as a Muon Collider test facility.

Collaboration name

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