

Using Tevatron Magnets for HE-LHC or New Ring in LHC Tunnel

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Abstract - Two injector accelerator options for HE-LHC of $p^+ - p^+$ collisions at 33 TeV cms energy are briefly outlined. One option is based on the Super-SPS (S-SPS) [1] accelerator in the SPS tunnel, and the other one is based on the LER (Low-Energy-Ring) [2] accelerator in the LHC tunnel. Expectations of performance of the main arc accelerator magnets considered for the construction of the S-SPS and of the LER accelerators are used to tentatively devise some selected properties of these accelerators as potential injectors to HE-LHC.

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