HAW14-2014-000885

Abstract for an Invited Paper for the HAW14 Meeting of the American Physical Society

Spin and Beam Dynamics at the Fermilab Main Injector

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Initial studies performed by the Spin@Fermi collaboration for producing and maintaining a polarized proton beam at 120 GeV using a single Siberian snake in the Fermilab Main Injector have been promising. More detailed studies incorporating a single Siberian snake into the Main Injector lattice and a partial snake as well as pulsed quadrupoles into the Booster lattice are presently underway. The resulting beam and spin dynamics given specific new equipment configurations are being examined. The current status of these simulation studies will be presented.