

Muon Cooling, Muon Colliders, and the MICE Experiment
D. Kaplan on behalf of the MICE Collaboration

Muon colliders and neutrino factories are attractive options for future facilities aimed at achieving the highest lepton-antilepton collision energies and precision measurements of parameters of the Higgs boson and the neutrino mixing matrix. The performance and cost of these depend sensitively on how well a beam of muons can be cooled. Recent progress in muon cooling design studies and prototype tests nourishes the hope that such facilities can be built during the next decade. The status of the key technologies and their various demonstration experiments will be summarized.