

Abstract Submitted  
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**Petavac: 100 TeV hadron collisions in the SSC tunnel** PETER MCINTYRE, AKHDIYOR SATTAROV, Texas A&M University — Nb<sub>3</sub>Sn superconductor has been tamed into practical use to make possible high-field dipoles (16 T) and solenoids (25 T). A ring of Nb<sub>3</sub>Sn dipoles and quadrupoles could be installed in the SSC tunnel in Waxahatchie to make a hadron collider with 100 TeV collision energy - 7 times higher than the design energy of CERN's LHC. The Petavac would access new physics through boson fusion, making it possible to observe signals from supersymmetry and superstrings up to  $\sim 10$  TeV mass scale.

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