Status Of Nb$_3$Sn Accelerator Magnet R&D at Fermilab

A.V. Zlobin

Abstract - New accelerator magnet technology based on Nb$_3$Sn superconductor is being developed at Fermilab since late 90’s. Six short dipole models, seven short quadrupole models and numerous individual dipole and quadrupole coils have been built and tested, demonstrating magnet performance parameters and their reproducibility. The technology scale up program has built and tested several dipole and quadrupole coils up to 4-m long. The results of this work are summarized in the paper.

IEEE/CSC & ESAS EUROPEAN SUPERCONDUCTIVITY NEWS FORUM (ESNF), No. 16, April 2011
Paper selected from the Proceedings of the EuCARD - HE-LHC'10 AccNet Mini-Workshop on a "High Energy LHC." Reference No. ST261; Category 6.