## Institut de recherche sur les lois fondamentales de l'univers SÉMINAIRE

Mardi 16 juin 9h00

CEA-Saclay Bât 141, salle André Berthelot

## Superconducting Magnet System for J-PARC Neutrino Beam Line

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A superconducting magnet system for the J-PARC neutrino beam line was constructed. The system consists of 14 doublet cryostats; each contains 2 combined function magnets (SCFM). The SCFM uses two single layer left/right asymmetric coils that produce a dipole field of 2.6 T and quadrupole of 19 T/m for 50GeV operation. The SCFMs had been developed by 2004, mass-produced since 2005, and completed by summer 2008. The system has been installed since Feb. 2008 till the end of 2008. A hardware commissioning as well as a beam commissioning of the system was carried out in Jan. to May 2009. The presentation summarizes the magnet development and system overview including cryogenics. The presentation also reports the production, installation and commissioning status, with our sincere appreciation for the kindest cooperation given by CEA Saclay.