

Mardi

14

Mars 2006

## SEMINAIRE SACM

11 H 00 Tsukasa KIYOSHI  
(Tsukuba Magnet Laboratory)  
Salle André Berthelot, Bât 141

### Magnet developments at TML/NIMS



Magnet developments at TML will be overviewed. TML has a history for major achievements in the development of high-field superconducting magnets. In 1976, the first high-field superconducting magnet at TML generated a field of 17.5 T in a 32 mm cold bore using Nb<sub>3</sub>Sn and V<sub>3</sub>Ga tape conductors. This set the world record for superconducting magnets at that time, a position that the magnet retained for ten years. A second TML magnet broke the record by generating 18.1 T with a combination of NbTi, (Nb,Ti)3Sn, and V<sub>3</sub>Ga conductors in 1986, and a 21 T superconducting magnet, generating 18 T in a 160 mm cold bore, held the record from 1993. In 1999, a field of 23.4 T, currently the world record for superconducting magnets, was generated by inserting two Bi-2212 double-pancake coils in the bore. TML has also developed pulsed magnets and resistive magnets. A field of 37.9 T was generated using a hybrid magnet system.

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NB : La présentation d'une carte d'identité ou d'u passeport est exigée à l'entrée du centre .  
Tous les auditeurs extérieurs sont priés de prévenir à l'avance de leur visite : Geneviève  
VERON Tél. : 01 69 08 69 49 (UE : délai de 24h, hors UE : délai de 4 jours) .