

Service des Accélérateurs, de Cryogénie et de Magnétisme

Mardi

## SEMINAIRE SACM

4

10 H 45 Dr. Stephen Gourlay

Juillet 2006

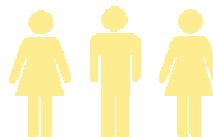
Director, Accelerator and Fusion Research Division  
(Lawrence Berkeley National Laboratory)

**“2006 Distinguished Lecturer”**

**for the IEEE Council on Superconductivity**

Salle André Berthelot, Bât.141

### **Challenges and Prospects for the Large-Scale Application of Superconductivity**



The phenomenon of superconductivity was discovered almost 100 years ago. However, the challenges posed in exploiting the amazing property of zero electrical resistance has proven difficult in practice. So far, large-scale applications of superconductivity have been largely limited to those for which there was generally no conventional option. In these cases, superconductivity has enabled new science and technology that could not exist without it. Thanks to persistent ongoing research and the development of new materials, the field is far from exhausted. On the contrary, many new applications in addition to high field magnets for scientific research and medical applications are on the horizon. This talk will summarize the current status of large-scale applications of superconductivity and examine the prospects and challenges for new large-scale applications in the future.



Le café sera servi 15 minutes avant

dapnia

cea

saclay

NB : La présentation d'une carte d'identité ou d'un 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).