

## Séminaire SPP

## Mercredi 17 décembre 10h30

CEA-Saclay Bât 141, salle André Berthelot

## Fermilab Plan Young-Kee Kim

(Fermilab)

U.S. particle physics is pushing forward on three interrelated frontiers : the Energy Frontier, the Intensity Frontier, and the Cosmic Frontier. Each has a unique approach to making discoveries, and all three are essential to answering the central questions in particle physics. I will trace out the path from where we are at Fermilab and what we plan to do to take the next steps at the three frontiers. One of central pieces of the near-term plan is an intensity-frontier linear accelerator at about two percents of the ILC's length which, together with existing accelerators, creates Project X. Project X's intense beams would give Fermilab's scientific users an excellent way into the world of neutrinos and precision physics. With its ILC technology, Project X would spur U.S. industrialization of ILC components and would drive forward the technology for still higher-energy accelerators of the future, such as a muon collider. Fermilab's plan would maintain the nation's leadership in particle physics on the pathway to discovery both at the Terascale, and in the domain of neutrinos and precision physics at the intensity frontier.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Emilie Chancrin, tél. 01 69 08 23 50, e-mail : emilie.chancrin@cea.fr. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).