

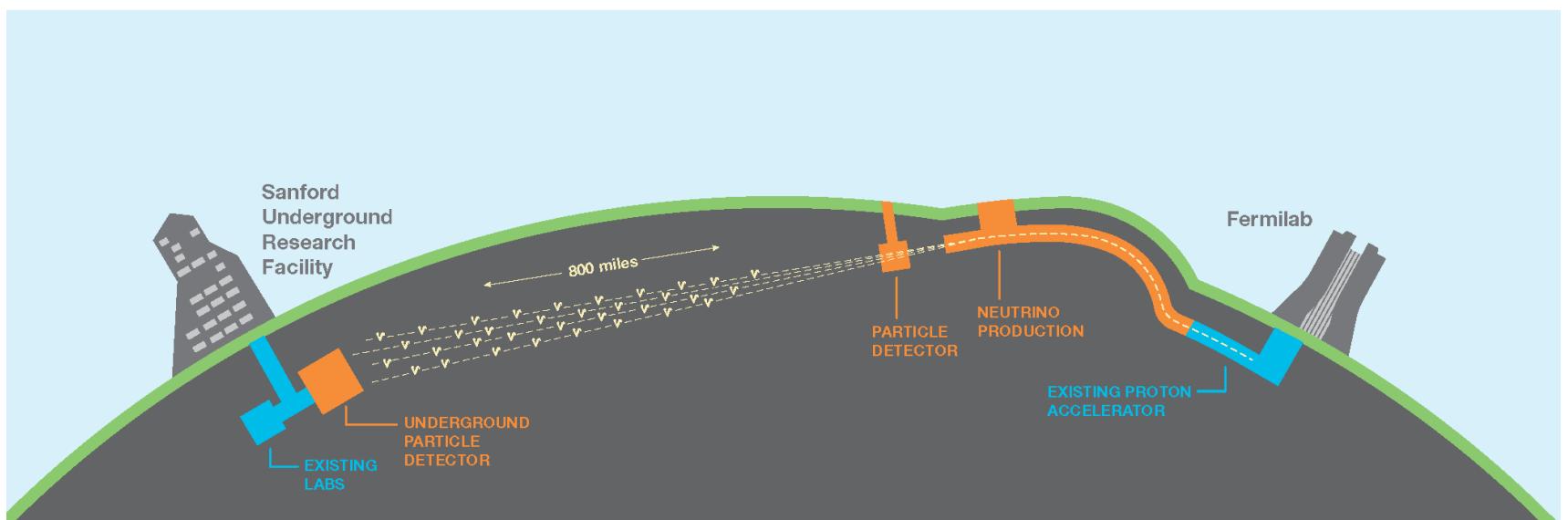


DUNE: The Deep Underground Neutrino Experiment.

Mark Thomson (Univ. of Cambridge)

Tuesday, 8 December 2015

16:45 h, bld. 1b, Sem.R. 4a/b



Fermilab is undertaking an ambitious program of long- and short-baseline neutrino oscillation experiments utilizing large Liquid Argon (LAr) TPC detectors. The flagship of this program is the DUNE/LBNF project, which is the highest priority of the US domestic particle physics program in the next decade. A high-power neutrino beam will be fired 1300 km from Fermilab towards a 40,000 ton LAr-TPC detector, located a mile underground at the Sanford Underground Research Facility in South Dakota. In this seminar, I will review the scientific goals of DUNE, focussing on neutrino physics and, in particular, the potential for the first definitive observation of CP violation in the leptonic sector. I will discuss the current status of the LBNF/DUNE and the recent rapid progress that has been made towards its realization as a truly international project.

Coffee, tea and cookies will be served at 16:30h.

After the seminar there is a chance for private discussions with the speaker over wine and pretzels.

