News from Fermilab (Kamran Vaziri)

The Fermilab accelerators shutdown, originally scheduled to start in September 2008, was postponed to mid-June, 2009 in order to maximize running time before the cessation of Collider operations planned for October 1, 2010. As I reported previously, the goal is to collect as much data as possible to search for the elusive Higgs_boson. For FY 2008 integrated luminosity (average of the two Collider detectors) totaled 1789.5 pb-1, 105% of the design goal and 136% of that delivered in FY 2007. Over 48 weeks of scheduled operations, a total of 5032 store hours was delivered, 100% of the design goal. Total on-line average integrated luminosity for Run II stood at 4.993 fb-1 as of 9/29/08. Last time we reported the latest Tevatron luminosity record was 292.4E30/cm^2/s in the first quarter of 2007. However, the Tevatron improvements did not stop there. Intense effort to improve the machine's performance continues. The latest average luminosity record is 355.1E30/cm^2/s. All these achievements were made in the face of four months of forced furloughs and impending involuntary reductions in force in 2008.

While the neutrino program with MiniBooNE and MINOS experiments continue to produce world-class results, future projects are being developed to sustain the laboratory through the next decade, after the Tevatron shuts down. Work continues on NOvA, MINERvA, and several other projects including one to send a neutrino beam to a neutrino detector in the Deep Underground Science and Engineering Laboratory (DUSEL) at South Dakota and Project-X which I reported on previously. In the meanwhile the R&D for the International Linear Collider (ILC) and the muon collider constitute a huge agenda for the laboratory.