



DESY Seminar

12 December 2006, 17:00, DESY Hörsaal

Nick Ellis (CERN)

Triggering in the LHC Environment

The Large Hadron Collider presents unprecedented challenges for triggering due to the extremely high interaction rate (of order 10^9 Hz for proton--proton collisions at the design luminosity), the short bunch-crossing interval (25 ns), and the complexity of the events at 14 TeV centre-of-mass energy. The seminar will concentrate on the general-purpose experiments, with particular emphasis on ATLAS where the speaker is working. Starting from physics and system-performance requirements, the design concepts of the LHC trigger systems will be presented. Some illustrative examples of trigger subsystems then will be described. Finally the speaker will comment on the present status, and plans for commissioning the trigger systems in preparation for first collisions.

- Tea and cookies will be served at 16:45 in the lobby.
- After the seminar there is a chance for private discussions with the speaker over wine and pretzels also in the lobby.