



DESY Seminar

9 January 2007, 17:00, DESY Hörsaal

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Towards radiation hard tracking detectors for SLHC

In the recent years much effort was invested in the upgrade of LHC (SLHC), particularly the tracking detectors. An order of magnitude larger luminosity ($10^{35} \text{ cm}^{-2} \text{ s}^{-1}$) will result also in much larger radiation damage inflicted to tracking detectors when compared to LHC. Presently used detectors would fail. In spite of efforts to find more radiation hard materials, silicon remains the most likely choice for tracking detectors.

In this talk the aspects of designing and operating a radiation hard position sensitive silicon detector for SLHC experiments will be discussed. As a guideline the ATLAS tracker will be considered. An overview of the current status of the CERN RD-50 collaboration, which develops radiation hard silicon detectors, will also be given.

- 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.