

Radiation damage effects in the LHCb Vertex Locator

Monday 3 June 2013 15:30 (30 minutes)

The LHCb experiment is dedicated to searching for New Physics effects in the heavy flavour sector, precise measurements of CP violation and rare heavy meson decays. The LHCb VELO (VErtex LOcator) silicon micro-strip detector is the highest precision vertex detector at the LHC and is located at only 8 mm from the proton beams. Consequently the sensors receive a large and non uniform radiation dose. In this presentation, many interesting radiation damage effects such as (a) current as a function of time and voltage (b) charge collection efficiency and (c) noise behavior will be reported for the VELO sensors.

Author: XING, Zhou (Syracuse University (US))

Presenter: XING, Zhou (Syracuse University (US))

Session Classification: Session 2: Radiation Damage in LHC detectors