

2) Future Tracking Systems, Title: LHCb Upgrade - Chris Parkes

The LHCb upgrade is likely to be the first upgrade at the LHC, around 2012, independent of SLHC plans. LHCb phase 1 defocusses the LHC from its design luminosity by a factor 50 due to a) radiation damage as the vertex locator active silicon is inside the LHC vacuum and only 8mm from the beam b) effective triggering. Rad hard technologies + FPGA developments mean that operating at a higher lumi is possible at relatively modest cost using the existing accelerator infrastructure. The talk will focus on the Velo and displaced vertex trigger but report on current ideas for the other elements of the tracking system.