



LHC Seminar

SPEAKER: Mitesh Patel (Imperial College Sci., Tech. & Med. (GB))

TITLE: **Electroweak penguin decays as probes of physics beyond the Standard Model**

DATE: Tue 08/05/2012 11:00

PLACE: Main Auditorium

ABSTRACT

Electroweak penguin decays are sensitive to new, virtual particles and therefore offer a unique window on any physics beyond the Standard Model. In the B sector, penguin decays such as $B^0 \rightarrow K^0 \mu^+ \mu^-$ give a number of measurable quantities which can be precisely predicted by theory. The LHCb experiment has made the world's most precise measurements of this and several other related decays. These measurements give constraints on any new physics phenomena contributing to the relevant loop processes at mass scales well in excess of those that can be accessed by direct searches. The recent experimental progress of such measurements will be presented.