Contribution ID: 26 Type: not specified

Physics Prospects for the SuperB Factory

Tuesday, 19 June 2012 15:10 (20 minutes)

With an integrated luminosity goal larger than 75 ab-1, the SuperB factory is expected to be built on the Tor Vergata campus near Rome Italy by 2016. Its goal is to unravel the detailed structure of the new physics likely to be discovered at the LHC, and to explore BSM physics beyond the direct reach of the LHC. These goals will be achieved through the study of a wide variety of rare B, charm and tau processes which are sensitive to the presence of new degrees of freedom in virtual loops. The physics prospects of this ultra-high luminosity e+e- collider will be presented in detail, as well as the innovations in the machine and detector designs. The advantages of building a new collider, rather than upgrading a previous generation machine, will be discussed. These include beam polarization and the ability to run at charm threshold with a significant boost.

Primary author: Dr FLOOD, Kevin (Caltech)

Presenter: Dr FLOOD, Kevin (Caltech)

Session Classification: Tue 14:00-15:30