

Department of Physics and Space Sciences Colloquium

***“The Super-KEKB Accelerator and the Belle-II Detector  
and Experiment”***



Dr. Milind Purohit  
University of South Carolina

**At the Large Hadron Collider at CERN typically 25 events are recorded simultaneously by each of the major detectors CMS and ATLAS. This is partly due to the high proton-proton collision cross-section and partly due to the high "luminosity" of the collider which provides intense beams colliding 40 million times every second.**

**A new collider in Japan has started up and is planning on delivering 100 times as much luminosity as the LHC. This "Super-KEKB" accelerator will collide electrons on positrons and plans to deliver the highest luminosity of any machine for the foreseeable future.**

**The talk will describe how this is done, what the particle detector that is due for completion in about a year or so will detect, and what new physics we hope to glean from the collisions.**

**Friday, April 1, 2016  
4:00-5:00P.M.  
Olin Physical Sciences Room 140**

Light refreshments to be served