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Exploiting the Physics Potential of the LHC

The current LHC schedule foresees colliding beams until 2038. To reach a total luminosity of more than 3000/fb, an increase in intensity is scheduled in 2026 to 5 to 7 times the nominal LHC luminosity, equivalent to 140 to 200 simultaneous proton-proton collisions. About 90% of the LHC data will be accumulated with these challenging conditions. In addition, aging and radiation damage will take a toll on the detectors. The ATLAS and CMS collaborations developed a coherent plan to meet these challenges. In this talk I will discuss the long term physics program of the LHC and the challenges and opportunities of operating detectors in the high luminosity LHC environment.

Friday
Oct 30, 2015
4:00pm
301 Physical Sciences Bldg.