



Prospect of New Physics Searches using the High Luminosity LHC.

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Tuesday, 16 September 2014 16:45 h, Auditorium

After the observation of a Higgs boson near 125 GeV, the high energy physics community is investigating possible next steps for entering into a new era in particle physics. It is planned that the Large Hadron Collider will deliver an integrated luminosity of up to 3000/fb for the CMS and ATLAS experiments, requiring several upgrades for all detectors. The reach of various representative searches for supersymmetry and exotica physics with the upgraded detectors are discussed in this context, where a very high instantaneous luminosity will lead to a large number of pileup events in each bunch crossing. This talk presents example benchmark studies for new physics prospects with the upgraded ATLAS and CMS detectors at a centre-of-mass energy of 14 TeV. Results are shown for an integrated luminosity of 300 and 3000/fb.



Accelerators | Photon Science | Particle Physics

Coffee, tea and cookies will be served at 16:30h.

After the seminar there is a chance for private discussions with the speaker over wine and pretzels.

