Contribution ID: **174** Type: **not specified**

Physics at a High-Luminosity LHC with ATLAS (Update)

The physics accessible at the high-luminosity phase of the LHC extends well beyond that of the earlier LHC programme. Selected physics goals, spanning from Higgs boson physics and vector boson scattering to new particle searches and rare top decays, have been presented in a note submitted to the open symposium in Cracow. This note updates the studies on Higgs-boson properties and vector boson scattering. They illustrate the substantially enhanced physics reach with an increased integrated luminosity of 3000 fb-1, and motivate the planned upgrades of the LHC machine and ATLAS detector.

Primary author: ATLAS COLLABORATION, The (CERN)