Elastic and Total Cross-Section Measurements by TOTEM

Monday, 26 June 2017 10:05 (20 minutes)

The TOTEM collaboration at the LHC has completed its analysis of the elastic, inelastic and total proton-proton cross-sections (via the optical theorem) at $\sqrt{s} = 2.74$ TeV. The new measurement lies close in energy to the Tevatron’s 1.8 TeV with its two slightly conflicting total cross-section results.

The presentation will put the new measurement in the context of completed, ongoing and future measurements at other energies. In particular, preliminary results on the elastic cross-section at $\sqrt{s} = 13$ TeV will be shown.

Primary author: TOTEM COLLABORATION
Presenter: DEILE, Mario (CERN)
Session Classification: Elastic Scattering and Total Cross Section
Track Classification: Elastic scattering and total cross section