

Z boson forward-backward asymmetry measured with the ATLAS detector

We present a measurement of the Z boson forward-backward asymmetry of the process $pp \rightarrow \gamma^*/Z + X \rightarrow l+l- + X$ in collisions at $\sqrt{s} = 7$ TeV, where $l = e$ or μ . The asymmetry is measured in the Collins-Soper frame using the angle θ between the incoming quark and outgoing lepton. The measurement uses recent data from the ATLAS experiment. At high dilepton invariant mass, the measurement is sensitive to several scenarios of physics beyond the Standard Model.

Primary author: Dr BARONCELLI, Antonio (INFN / Roma TRE)

Presenter: Dr BARONCELLI, Antonio (INFN / Roma TRE)

Track Classification: Top and Electroweak Physics