

Measurement of the forward-backward asymmetry in $Z \rightarrow \mu\mu$ decays and determination of the effective weak mixing angle

Dr. Joe Price

University of Liverpool (UK)

The electroweak mixing angle is a fundamental parameter in the Standard Model.

The world's best determinations of the angle, by LEP and SLD, exhibit a tension that must be resolved. Measurements have been performed at hadron colliders, and future results from the LHC may achieve the level of precision necessary to solve the puzzle.

I will present a summary of the current status of measurements of the effective electroweak mixing angle, with a focus on the recent result using the Run 1 dataset at LHCb (arXiv 1509.07645).