Measurement of W Boson Helicity at ATLAS SUYOG SHRESTHA, Iowa State University — The Standard Model predicts that the top quark almost always decays via the V-A charged current interaction to a W boson and a b quark. It also predicts the fractions of W bosons produced in each polarization state. A measurement of W boson helicity fractions significantly different from the SM values would be an indication of new physics. In this talk I will present results from a Monte Carlo study with an integrated luminosity of 730 pb⁻¹ for the measurement of W boson helicity at ATLAS.

Suyog Shrestha
Iowa State University

Date submitted: 15 Oct 2009

Electronic form version 1.4