

Improving dark matter searches through precision measurements at ATLAS

Dr. Monica Dunford

Kirchhoff-Institut für Physik Heidelberg

Precision studies of well-known Standard Model particles such as the W and Z boson in association with jets are critical building blocks for understanding the Standard Model as well as searches for new physics, especially searches for possible dark matter candidates. In this talk, I will briefly review the status of dark matter searches at the LHC and discuss recent measurements of W/Z+jets using the ATLAS detector. I will discuss how these measurements are critical to future searches for dark matter during Run II of the LHC.