

Investigation of hadron collisions with angular correlations

Wednesday, January 3, 2018 6:15 PM (15 minutes)

Two-particle angular correlations as a function of pseudorapidity difference, $\Delta\eta$, and azimuthal angle difference, $\Delta\varphi$, are a comprehensive tool which allows the explanation of the underlying physics phenomena of particle production in collisions of both protons and heavy ions. These correlations open up the possibility to study a number of mechanisms simultaneously. Many phenomena, including mini-jets, elliptic flow, Bose-Einstein correlations, resonance decays, conservation laws, are sources of correlations. In this talk I will present an short overview of two-particle angular correlation measurements, with emphasis on recent surprising results of the correlations of identified particles (π , K, p, Λ) in pp collisions at $\sqrt{s} = 7$ TeV from ALICE.

Summary

Primary author: JANIK, Malgorzata Anna (Warsaw University of Technology (PL))

Presenter: JANIK, Malgorzata Anna (Warsaw University of Technology (PL))

Session Classification: Wednesday PM

Track Classification: Heavy Ion physics