

Baryon-baryon femtoscopy in pp collisions at 7 TeV

Femtoscopy studies of protons and Lambda hyperons have been carried out in pp collisions at 7 TeV, as measured by the ALICE collaboration. Contrary to the more complex situation in heavy-ion collisions, the Lambda-proton femtoscopy measurement in pp collisions allows us to investigate the scattering parameters for the hyperon-nucleon pair as the source that characterises the emission of the particle pair can be better constrained.

We present the analysis steps and corrections to obtain the correlation functions, and the method developed to evaluate the feed-down and background contributions to the genuine two-particle correlations. We also report on the study of the particles source for pp collisions carried out with the EPOS event generator. The sensitivity of the method to test different scattering parameters for the Lambda-proton pair are discussed.

Preferred Track

QCD in small systems

Collaboration

ALICE

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