

ID de Contribution: 159

Type: Poster

Proton source measurement in pp collisions at 900 GeV with the femtoscopy technique

mardi 4 juin 2024 19:37 (1 minute)

Key aspects in modeling the formation of bound systems such as the deuteron in high-energy collision are the understanding of the strong interaction between nucleons and the characterization of the nucleon-emitting source, which is particularly relevant in models of nucleon coalescence. In this respect, the femtoscopy technique has proven to be a great tool to study both the particle emitting source and the strong interactions in detail.

In this contribution, the femtoscopy method is used to measure proton-proton correlations and to extract the two-particle emission source size in pp collisions at $\sqrt{s} = 900$ GeV, which is the lowest collision energy at the LHC using data from the Run 3 campaign and the upgraded ALICE detector. Applications of the results as input for the modeling of (anti)deuteron formation by coalescence are discussed.

Auteur principal: AGRAWAL, Neelima (University of Bologna, Bologna (IT))

Co-auteur: COLLABORATION, ALICE

Orateur: AGRAWAL, Neelima (University of Bologna, Bologna (IT))

Classification de Session: Posters

Classification de thématique: Collective effects in small systems