

Contribution submission to the conference SMuK 2021

Measurement of Neutral Mesons in pp Collisions at $\sqrt{s} = 13$ TeV with ALICE — ●JOSHUA KÖNIG for the ALICE-Collaboration
— IKF, Goethe-Universität Frankfurt

ALICE, the dedicated heavy-ion experiment at the LHC, investigates the properties of the quark-gluon plasma (QGP) that is believed to be produced in central AA collisions at high center-of-mass energies. Measurements in pp collisions provide a baseline for the AA collision system and can furthermore constrain the description of hadronization and fragmentation. Multidifferential measurements of neutral meson (π^0 , η , ω) production as function of p_T and the multiplicity can give further constraints on the particle production mechanisms. Moreover, these measurements provide the baseline for direct-photon analyses.

The reconstruction of neutral mesons via their two photon-decay channel can be realized in ALICE with several complementary methods, utilizing the calorimeters and the TPC. In this talk, the status of the light neutral meson analyses in pp collisions at $\sqrt{s} = 13$ TeV with ALICE will be presented.

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