

Hadronic resonance production measured by ALICE at the LHC

Friday 31 July 2020 11:24 (24 minutes)

Hadronic resonances with different lifetimes are very useful to probe the hadronic phase of heavy-ion collisions. Due to their relatively short lifetimes compared to the duration of the hadronic phase, resonances are good candidates to investigate the interplay between particle re-scattering and regeneration in the hadronic phase. In addition, having different masses, quantum numbers and quark content, hadronic resonances carry a wealth of information on different aspects of ion-ion collisions, including the processes that determine the shapes of particle momentum spectra, strangeness production, and the possible onset of collective effects in small systems. We here present the latest results on $\rho(770)^0$, $K^*(892)$, $f_0(980)$, $\phi(1020)$, $\Sigma(1385)^\pm$, $\Lambda(1520)$, $\Xi(1530)^0$ and $\Xi(1820)$ production in pp, p-Pb, Pb-Pb and Xe-Xe collisions at different energies. Results include system-size and collision-energy evolution of transverse momentum spectra, integrated yields, mean transverse momenta and particle ratios. These results will be given through comparisons to measurements from lower energy and theoretical models.

I read the instructions

Secondary track (number)

Author: GANOTI, Paraskevi (National and Kapodistrian University of Athens (GR))

Presenter: GANOTI, Paraskevi (National and Kapodistrian University of Athens (GR))

Session Classification: Heavy Ions

Track Classification: 07. Heavy Ions