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# Measurement of hadronic resonances with ALICE at the LHC

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The ALICE experiment has measured production of hadronic resonances such as $\rho^0$(770), K*(892), $\phi$(1020), $\Sigma(1385)^{\pm}$, $\Lambda$(1520) and $\Xi(1530)^0$ in pp, p-Pb and Pb-Pb collisions at various energies. Due to their short lifetimes, the hadronic resonances are sensitive to the re-scattering and regeneration processes occurring in the time interval between the chemical and the kinetic freeze-outs in heavy-ion collisions. Measurement of resonance yields and their ratios to the long-lived particles are used to study properties and lifetime of the late hadronic phase. The resonances, which differ by mass and quark content, also provide insights on the mechanisms driving the multiplicity-dependent enhancement of strangeness production and can be used to study parton energy loss and anomalous baryon-to-meson ratios at intermediate transverse momentum. Heavy-ion collisions are used to study resonance production in the hot and dense matter, while multiplicity dependence measurements in small systems are used to establish a reference and search for onset of collective phenomena. We present the most recent ALICE results on resonance production including the latest results from the LHC Run 2. These results, which include centrality- and multiplicity-differential transverse momentum spectra, integrated yields, mean transverse momenta, particle ratios and nuclear modification factors, are compared to the results for other hadron species, to lower energy experiments and predictions from theoretical models.

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