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## Hadronic resonance production in pp and Pb-Pb collisions at LHC with the ALICE experiment

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Abstract

Resonances, with their lifetime comparable to the lifetime of the partonic plasma phase, are a valuable tool to study the dynamics of the high energy density medium formed in heavy-ion collisions. Resonance measurements can be potentially used to estimate the time span between the chemical and kinetic freeze-out and interaction cross sections in the hadronic phase. Measurements of resonances in proton-proton collisions provide an important baseline for heavy-ion data as well for tuning QCD-inspired particle production models. The ALICE collaboration has measured  $K(892)0$  and  $\phi(1020)$  production in Pb-Pb collisions at  $\sqrt{s_{NN}}=2.76$  TeV and in pp collisions at 0.9, 2.76 and 7 TeV. The production of the  $\phi$  meson has been studied in pp collisions at 0.9, 2.76 and 7 TeV, while  $K(892)0$  and baryonic resonance production ( $\Sigma(1385)\pm$  and  $\Xi(1530)0$ ) have been measured in 7 TeV pp collisions. Characteristics of resonance production in these collisions systems will be discussed, in particular transverse momentum spectra and ratios such as  $\phi/\pi$ ,  $\phi/K$ ,  $K/K$ ,  $(\Omega+\text{anti-}\Omega)/\phi$ ,  $\Sigma/\Xi$ ,  $\Sigma/\pi$  and  $\Sigma/K$ . A comparison between central and peripheral production as well as one with QCD inspired models (for pp collision data) and thermal models will be shown.

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