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Type: **Experimental**

Resonances as Probes of Heavy-Ion Collisions at ALICE

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Hadronic resonances serve as unique probes in the study of the hot and dense nuclear matter produced in heavy-ion collisions. The properties of the hadronic phase of the collision (the temperature and lifetime) can be extracted from measurements of the suppression of resonance yields with respect to the yields of stable particles. A comparison of the transverse-momentum spectra of the $\phi(1020)$ meson and the proton (which have similar masses) can be used to study particle production mechanisms in heavy-ion collisions. Resonance measurements in pp collisions provide input for tuning QCD-inspired particle production models and serve as reference measurements to which results from other collision systems can be compared. Measurements of resonance properties in p-Pb collisions allow nuclear effects in the absence of a hot and dense final state to be studied. The ALICE Collaboration has measured resonances in pp, p-Pb, and Pb-Pb collisions. These measurements, including p_T spectra, masses and widths, mean transverse momenta, ratios to stable particles, and nuclear modification factors will be discussed and compared to results from other experiments and to theoretical models.

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