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# Latest results of hadronic resonance production with ALICE at the LHC

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Resonances with very short lifetimes can be used to probe the rescattering and regeneration ~ processes in the hadronic phase of the system produced after a high-energy collisions. These processes are studied by measuring resonance yields as a function of the system size and collision energy and comparing them to model calculations with and without the hadronic cascades. We present measurements of transverse momentum spectra, integrated yields ( $dN/dy$ ), mean transverse momenta ( $\langle p_T \rangle$ ), and angular distributions for light flavour hadronic resonances in pp, p-Pb, Xe-Xe, and Pb-Pb collisions at LHC energies.

The  $\langle p_T \rangle$  of resonances as a function of event multiplicity in central Pb-Pb collisions follow the same mass ordering as for other hadrons, expected from the hydrodynamic expansion of the system.

At high  $p_T$  ( $> 8$  GeV/c), nuclear modification factor ( $R_{AA}$ ) of light flavor hadrons in central Pb-Pb collisions shows strong suppression, whereas the nuclear modification factor in p-Pb collisions, known as  $R_{pPb}$  is consistent with unity. This parton energy loss effect is independent of the particle species.

Further, in non-central heavy-ion collisions, the vector mesons can be polarized due to spin-orbital-angular-momentum interaction or hadronization from polarized quarks due to their significant initial angular momentum. Recent measurements of spin alignment for  $K^{*0}$  and  $\phi$  mesons produced at midrapidity in pp and Pb-Pb collisions will be presented.

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