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## Charged-particle $p_T$ spectra as a function of multiplicity in pp, p-A and A-A collisions measured with ALICE

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The ALICE experiment is dedicated to investigating a hot and dense deconfined state of matter created in heavy-ion collisions. Complementary measurements in smaller collision systems have shown signs of collectivity emerging even in simple hadronic collisions. Particle production at the LHC is driven by a complex interplay of soft and hard QCD processes. It is still challenging for modern Monte-Carlo event generators to describe particle production for all collision systems consistently. The correlation between hadron transverse momentum ( $p_T$ ) spectra and the event multiplicity serves as a sensitive observable to provide insight into different particle production mechanisms at play.

This poster reports on the measurement of charged-particle transverse momentum spectra as a function of charged-particle multiplicity density, obtained using a 2-dimensional unfolding procedure. The  $p_T$  spectra of charged hadrons are reported as a function of center-of-mass energy in different colliding systems. In addition, particle spectra measured in pp, p-Pb, and Pb-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV are compared. This allows for a study of the center-of-mass energy dependence of particle production mechanisms in different colliding systems.

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