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## Energy and multiplicity dependence of charged particle production in pp and p-Pb collisions with ALICE at the LHC

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The study of the charged particle production as a function of the multiplicity in small colliding systems, as pp and p-Pb, is an attractive tool to understand the similarities and differences between small and large colliding systems. Evidence of similarities, like coherent and collective effects, well known in nucleus-nucleus (A-A) collisions, has been found experimentally in small systems.

New results on the primary charged-particle pseudo-rapidity density and transverse momentum ( $p_T$ ) distributions at central pseudo-rapidity in pp ( $\sqrt{s} = 5.02$  and  $\sqrt{s} = 13$  TeV) and p-Pb ( $\sqrt{s} = 5.02$  and 8.16 TeV) collisions as a function of multiplicity are going to be presented.

In order to study the hard component of particle spectra in pp collisions, a power law fit of the distributions for  $p_T > 4$  GeV/c is performed and the evolution with multiplicity of the resulting fit parameters is discussed. To the same purpose, the ratio of multiplicity-dependent yields over minimum bias yields integrated over  $4 < p_T < 8$  GeV/c is studied and compared to results for heavy-flavour particles. Results are presented using two multiplicity estimators, at mid pseudo-rapidity ( $|\eta| < 0.8$ ) and forward-backward pseudo-rapidity ( $-3.7 < \eta < -1.7$  and  $2.8 < \eta < 5.1$ ) to study the differences caused by the multiplicity selection in different pseudo-rapidity windows.

A comparison with Monte Carlo event generators and models, like EPOS-LHC and PYTHIA 8, will be shown.

**Primary author:** IGA BUITRON, Sergio Arturo (Universidad Nacional Autonoma (MX))

**Presenter:** IGA BUITRON, Sergio Arturo (Universidad Nacional Autonoma (MX))

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