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## $J/\psi$ production in high-multiplicity pp collisions and p-Pb collisions with ALICE

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The availability of the largest collision energy in pp collisions at the LHC allows a significant advance in the measurement of  $J/\psi$  production as a function of event multiplicity. The interesting relative increase measured in pp collisions at the LHC at  $\sqrt{s} = 7$  TeV and at RHIC at  $\sqrt{s} = 200$  GeV is studied now at unprecedented multiplicities for pp collisions. The newest measurement performed at mid-rapidity in pp collisions at  $\sqrt{s} = 13$  TeV, facilitated by triggering on high-multiplicity events, imposes strong constraints to theoretical models, such as those implementing multiple partonic interactions. Also, it allows the comparison with the  $J/\psi$  production studied in p-Pb collisions at similar event multiplicities. We will show our newest measurements of  $J/\psi$  yields as a function of transverse momentum and event multiplicity in pp collisions at  $\sqrt{s} = 2.76, 5.02$  and 13 TeV at mid- and forward-rapidity together with those obtained in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  and 8.16 TeV. The discussion will include comparisons with recent theoretical calculations.

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