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Studying Tsallis distribution at LHC energies

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A thermodynamically consistent form of the Tsallis distribution at y = 0 has been used for fitting the transverse momentum spectra $d^2N/dydp_T$ and to study the yields of particles measured by the ALICE and CMS experiments at the CERN Large Hadron Collider (LHC). The Tsallis distribution describes the p_T spectra very well. The values of $dN/dy|_{y=0}$ obtained from the Tsallis distribution are in agreement with the values measured by the ALICE and CMS experiments. The data to fit ratio and centre-of-mass energy dependence of $dN/dy|_{y=0}$ will be presented
and discussed. An attempt will be made to study the particle ratios using Tsallis
distribution at LHC energies.

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