

## Centrality dependence of freeze-out temperature fluctuations in Pb-Pb collisions at the LHC

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Many data in the High Energy Physics are, in fact, sample means. It is shown that when this exact meaning of the data is taken into account and the most weakly bound states are removed from the hadron resonance gas, the whole spectra of pions, kaons and protons measured at midrapidity in Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV can be fitted simultaneously. The invariant distributions are predicted with the help of the single-freeze-out model in the chemical equilibrium framework. The method is applied to the measurements in centrality bins of Pb-Pb collisions and gives acceptable fits for all but peripheral bins. The comparison with the results obtained in the framework of the original single-freeze-out model is also presented.

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