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Anisotropic flow fluctuations in heavy ion collisions at the LHC energy with HYDJET++ model

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The LHC data on elliptic and triangular flow fluctuations from PbPb collisions at center-of-mass energy 2.76 TeV per nucleon pair are analysed and interpreted within the HYDJET++ model. The final state in HYDJET++ represents the superposition of two independent components: the soft state (parametrization of relativistic hydrodynamics with preset freeze-out conditions) and hard state (multi-paron fragmentation taking into account medium-induced partonic energy loss and nuclear shadowing effect). The simple modification of the model via introducing the distribution over spatial anisotropy parameters allows us to reproduce the basic features of anisotropic flow pattern at the LHC including event-by-event flow fluctuations.

On behalf of collaboration:

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