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Energy dependence of inelasticity coefficient in p-air interactions at energy 20 -1000 TeV

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Abstract. The comparison of all hadron spectrum, hadrons in families and ux of gamma-hadron families detected at the level 600 g/cm^2 in atmosphere (by the deep lead emulsion chamber of Pamir collaboration) with predictions of different models is presented. It is shown, that simultaneous description of these spectra can be done in frames of quark-gluon string models with inelasticity coefficient increasing from 0.63 ± 0.03 at 40 TeV to 0.67 ± 0.03 at 1000 TeV. The constancy or more sharp increase of inelasticity koefficient in this energy range contradicts to experimental data.

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