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## Cosmic ray muons in the frame of a model with heavy particles production in nucleus-nucleus interactions

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The excess of muons, which was found in a number of experiments, can be explained in frame of a qualitative model involving a change of nucleus-nucleus interactions at TeV energies (in the center of mass system) with the production of heavy particles. Usage of this model leads to a shift of the EAS development maximum and the generation of high-energy muons and neutrinos. Appropriate simulations of usually observed EAS characteristics (profile of the development in the atmosphere, spatial distribution of particles at the observation level) and, in particular, muon component have been performed on the basis of this model using well-known programs PYTHIA and CORSIKA.

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