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## STUDY OF PROTONS IN PROTON CARBON COLLISIONS AT 4.2 GeV/C USING UrQMD MODEL

The transverse momentum spectra of protons participated in the collision processes calculated using UrQMD model simulations have been compared with the  $p_t$  spectra of participant protons, obtained experimentally in interactions of protons beam with carbon nuclei at momenta of 4.2 GeV/c. Spectral temperatures of negative pions obtained in the experimental and UrQMD model simulated interactions of protons beam with carbon nuclei have been calculated by fitting both spectra with four different fitting functions i.e. Hagedorn Thermodynamic, Boltzmann distribution, Gaussian and Exponential functions. These functions are used commonly for describing the hadrons spectra and their spectral temperatures. The most suitable fitting functions among these four functions have been recommended.

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