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# CUMULATIVE PIONS IN 12C FRAGMENTATION AT 3.2 GEV/NUCLEON

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Charged pion momentum spectra in 12C fragmentation at a laboratory angle of 3.5o on Be target were measured in the FRAGM experiment at ITEP TWA heavy ion facility. Carbon beam energy was 3.2 GeV/nucleon. Positive pions were identified on severe proton background by TOF and Cherenkov counters. Yields of positive and negative pions have been measured up to 5.2 GeV/c momentum, which is approximately two times larger than maximal pion momentum in interaction of free nucleons. A kinetic energy spectra in a rest frame of projectile carbon ion are well described by an exponent. The slope parameter was compared with other measurements in ion-ion collisions as well as in proton-nucleus interactions in cumulative region..These data are also compared with predictions of four ion-ion interaction models: Binary Cascade, Quantum Molecular Dynamics, Los-Alamos Quark Gluon String Model and Liege Intranuclear Cascade. Negative to positive pion ratio is the most sensitive to differences between the models. Momentum spectra of protons, deuterons and 3He are also presented and compared with the model predictions. The work was supported by RFBR grant № 18-02-0844.

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