

Cumulative production of nucleons by heavy baryonic resonances in proton-nucleus collisions

Monday 8 January 2018 21:00 (15 minutes)

We investigate nucleon production in proton-nucleus collisions outside the kinematical boundary of proton-nucleon reactions.

The maximal energy of protons emitted in the backward direction is estimated.

We suggest that cumulative nucleons are produced by heavy baryonic resonances created in p+A collisions due to successive collisions with nuclear nucleons.

We also compare theoretical predictions to the results of Ultra Relativistic Quantum Molecular Dynamics simulations.

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