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Measuring nuclear fragmentation with the FOOT experiment

The FOOT (FragmentatiOn Of Target) experiment measures nuclear fragmentation cross sections in the 50-700 MeV/A energy range with about 5% uncertainty. Target nuclei (16O,12C) fragmentation induced by proton beams is studied via an inverse kinematic approach employing 16O, 12C beams impinging on graphite and polyethylene targets. Two complementary setups are used: the nuclear emulsions spectrometer measures the production of light charged nuclear fragments ($Z \leq 3$), while the electronic setup focuses on the heavier ($Z \geq 3$) fragments.

This contribution will discuss the first cross section fragmentation results with the nuclear emulsion spectrometer and the current status of the experiment.

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