

Hadron Production Measurements for Determination of Neutrino Flux

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The study of neutrino properties and oscillations has entered the precision era, and control of systematic uncertainties in the present and next generation of accelerator-based experiments is required to maximize the sensitivity of their measurements. One of the leading uncertainties in many measurements and searches for physics beyond the Standard Model arises from the neutrino flux predominantly coming from hadron production. This talk will review the challenges and impact of neutrino flux predictions and their uncertainties in neutrino experiments, and discuss recent efforts and future prospects to measure hadron scattering and production of neutrino parents by the NA61/SHINE experiment at CERN and the EMPHATIC experiment at Fermilab.

Poster prize

Given name

Surname

First affiliation

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Collaboration (if any)

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