

# NuFact 2024 - The 25th International Workshop on Neutrinos from Accelerators

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Type: **Talk: in-person**

## Hadron Production Measurements with EMPHATIC

*Thursday, 19 September 2024 14:25 (20 minutes)*

EMPHATIC (Experiment to Measure the Production of Hadrons At a Test beam In Chicagoland) is a table-top size experiment at Fermilab focused on hadron production measurements relevant to reducing the total neutrino flux uncertainties at accelerator-based neutrino experiments. The goals of the experiment include addressing the gaps in our understanding of hadron-scattering and the first-ever measurement of the hadron spectrum downstream of a neutrino beam target and horn. Recent progress from EMPHATIC will be discussed, including a first proof-of-principle measurement and collection of a large catalog of thin-target data. Plans for EMPHATIC over the next few years, including measurements with a replica NuMI target and horn will also be presented.

### Working Group

WG 3: Accelerator Physics

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**Session Classification:** Parallel: WG 1x3

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