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NuWro Strategy and Recent Development

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NuWro is a versatile Monte Carlo neutrino event generator, applicable for simulations in the energy range of the accelerator-based neutrino oscillation experiments. Since 2005, the theoretical group of the University of Wrocław, Poland, has been extensively working on its development, successfully comparing to various neutrino cross section measurements. NuWro is a vital tool for event generation in many experimental collaborations, providing a lightweight framework for model development and original solutions.
In this talk, we will present recent developments and advances in model implementations conducted within NuWro. Among others, we will demonstrate the phenomenological 2p2h model, hyperon production, and neutrino scattering off atomic electrons. We will emphasise the new philosophy of implementing more exclusive, computationally demanding models. Then, we will show the results of the Ghent low-energy model of single-pion production implemented within this strategy of using precomputed assets and importance sampling methods

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Working group

WG2

Primary author: NIEWCZAS, Kajetan (UWR)

Presenter: NIEWCZAS, Kajetan (UWR)

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