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NEUT Strategy

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NEUT is a neutrino-nucleus interaction simulation program library and used for the analyses of Super-K and T2K. Recently, NEUT is also used to simulate pion interactions with the nucleus in the detector simulation. In order to make the users access various functions in NEUT, we have started a project to design
a set of new APIs for easy access to the implemented total and interaction channel-level cross-sections, simulation of individual interaction to generate kinematics functions, and so on. At the same time, we also plan to update the existing detector geometry and flux handling programs for the T2K experiment
to make it more generic.
In this talk, we will also report the recent status and plan to implement new physics models, like SuSAv2/RMF CCQE models, MK and DCC 1pi models, improvements of the NC DIS implementation, together with the direction of future development.

Working group

WG2

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