Contribution ID: **783** Type: **Talk**

Advances in simulation and reconstruction for Hyper-Kamiokande

Wednesday, 29 July 2020 16:50 (20 minutes)

The next generation of neutrino experiments will require improvements to detector simulation and event reconstruction software matching the reduced statistical errors and increased and precision of new detectors. This talk will present progress for the software of the Hyper-Kamiokande experiment being developed to enable reduction of systematic errors to below the 1% level.
The current status and future prospects of this software will be presented, including advances in detector simulation and reconstruction using traditional techniques as well as new developments using modern machine-learning based approaches.
Applications for improved event selections and analysis of low-energy and high-energy neutrinos from astrophysical, atmospheric and neutrino beam sources will be discussed.

I read the instructions

Secondary track (number)

2

Primary author: PROUSE, Nick (TRIUMF)

Presenter: PROUSE, Nick (TRIUMF)

Session Classification: Computing and Data Handling

Track Classification: 14. Computing and Data Handling