

Tatsuya Kikawa (Kyoto University)

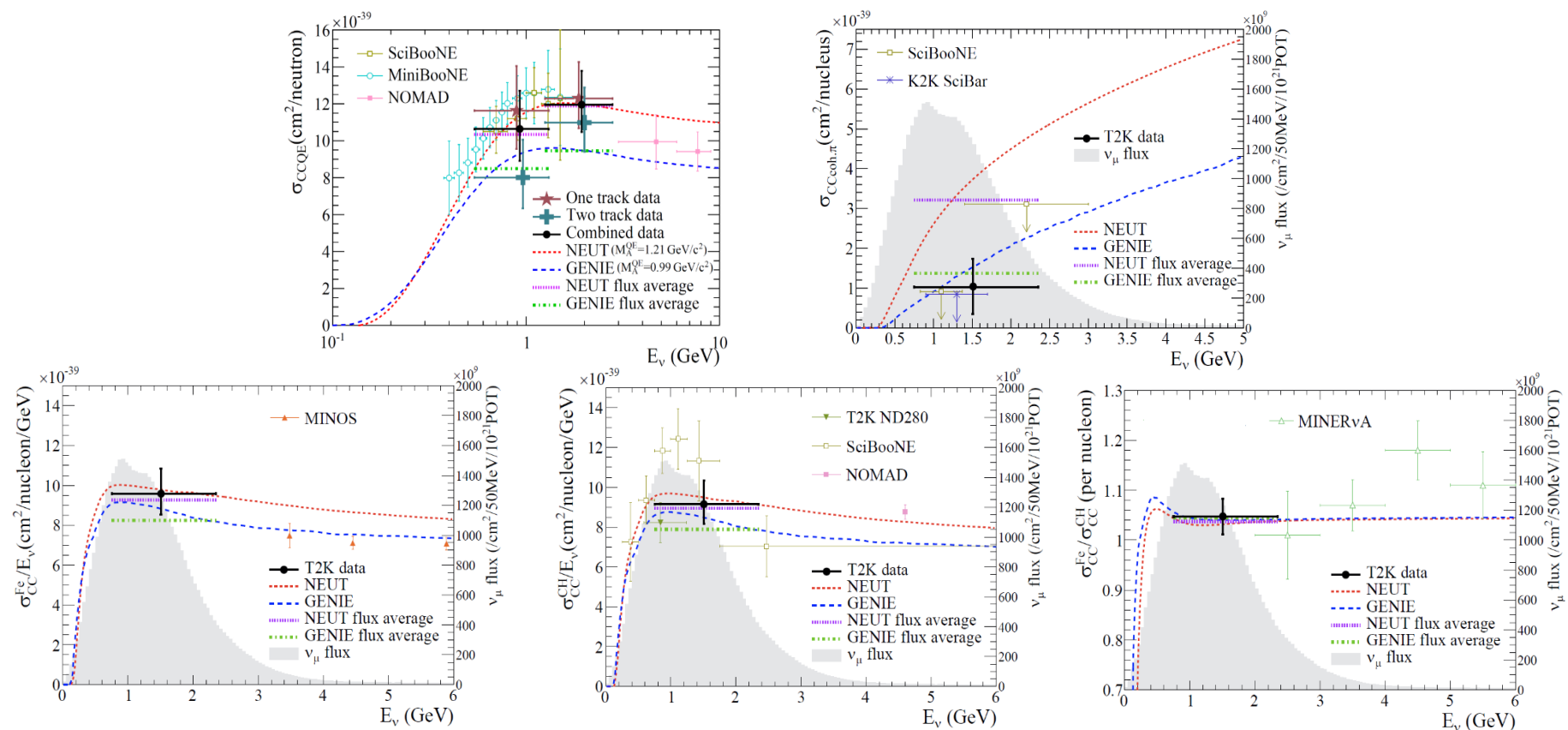


My research history

- 2009-2014: Graduate student in Kyoto University (Supervisors: Tsuyoshi Nakaya, Atsuko Ichikawa)
 - Development of new neutrino detector
 - Neutrino cross section measurement
 - Neutrino oscillation analysis
- 2014-2018: Postdoc at TRIUMF
 - Neutron EDM measurement using ultracold neutrons
- 2018-: Assistant professor in Kyoto University
 - Development of new neutrino detector
 - Neutrino cross section measurement

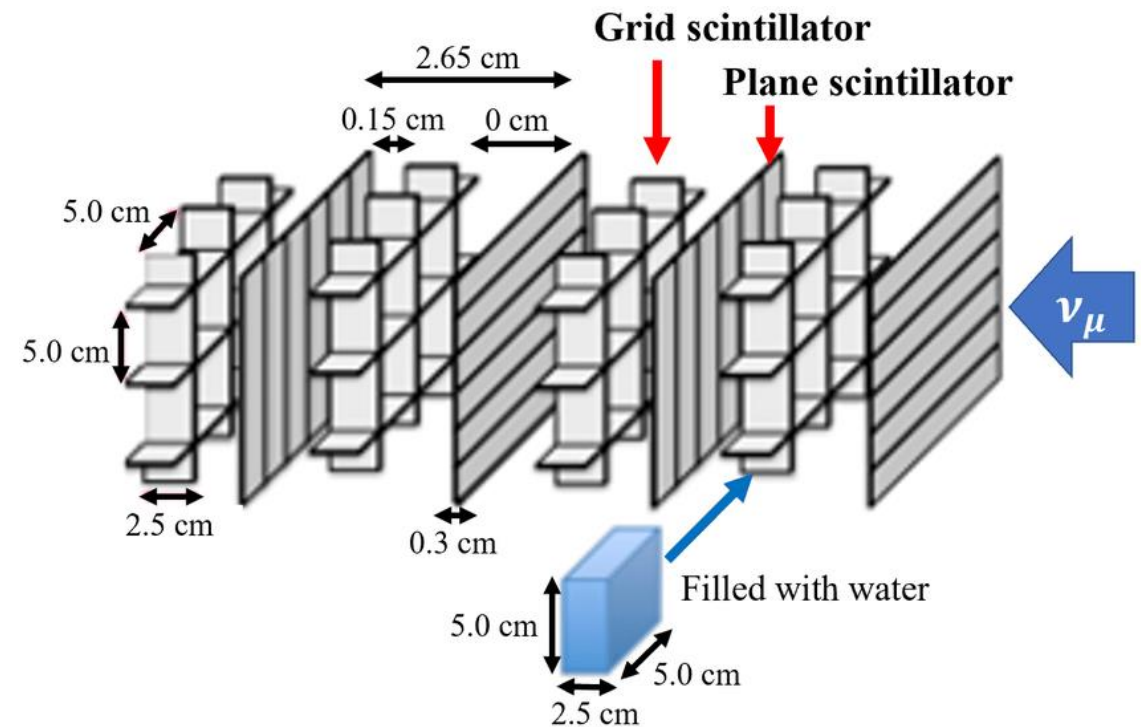
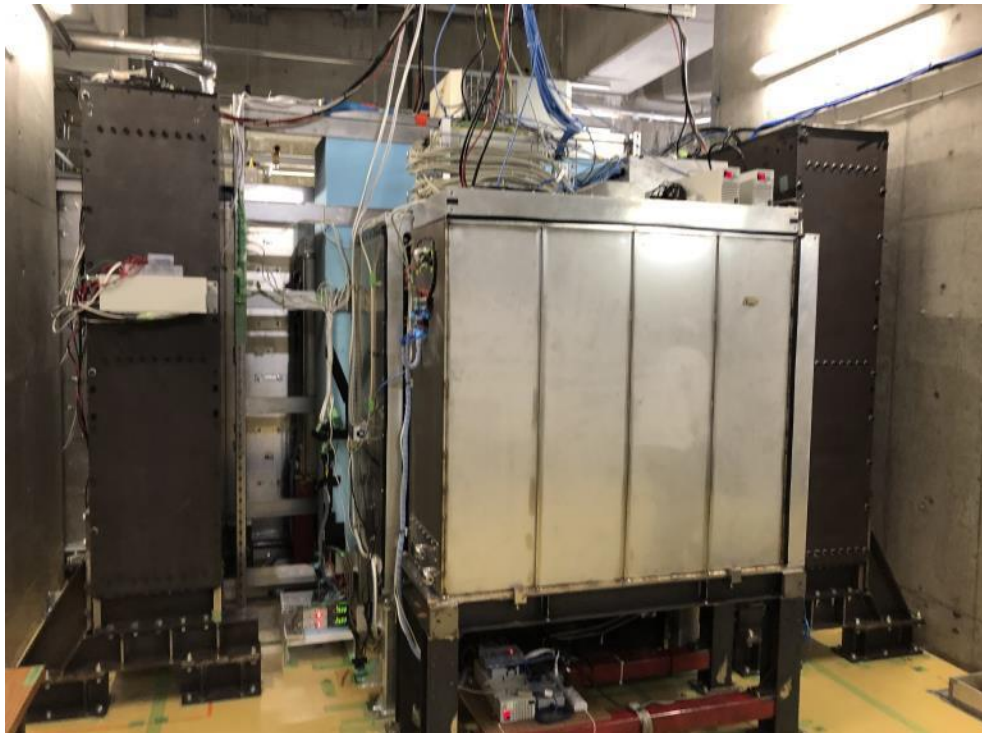
Proton Module detector

- Fully-active tracking detector made of plastic scintillator bars.
- Analyses of various interaction modes.



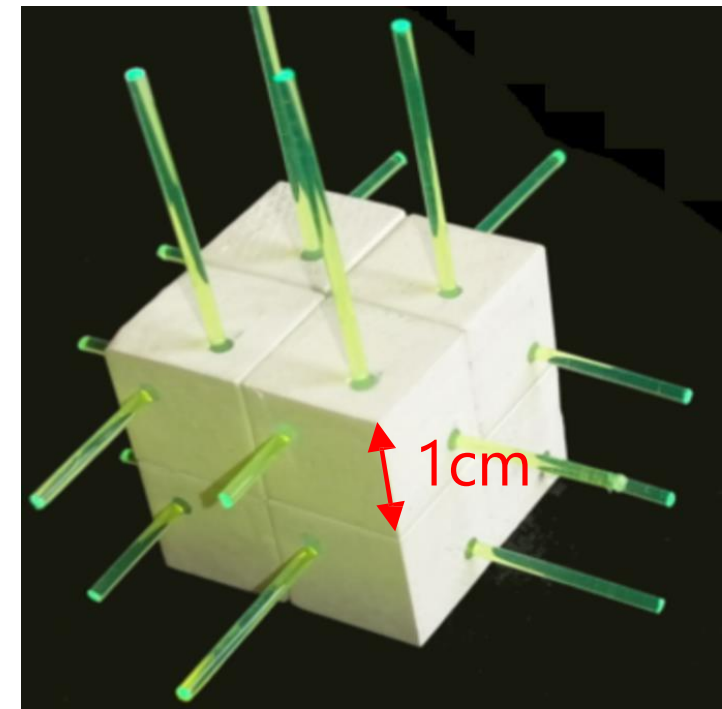
WAGASCI-BabyMIND detector

- Water target detector with special grid-shape scintillators.
- 4π acceptance.



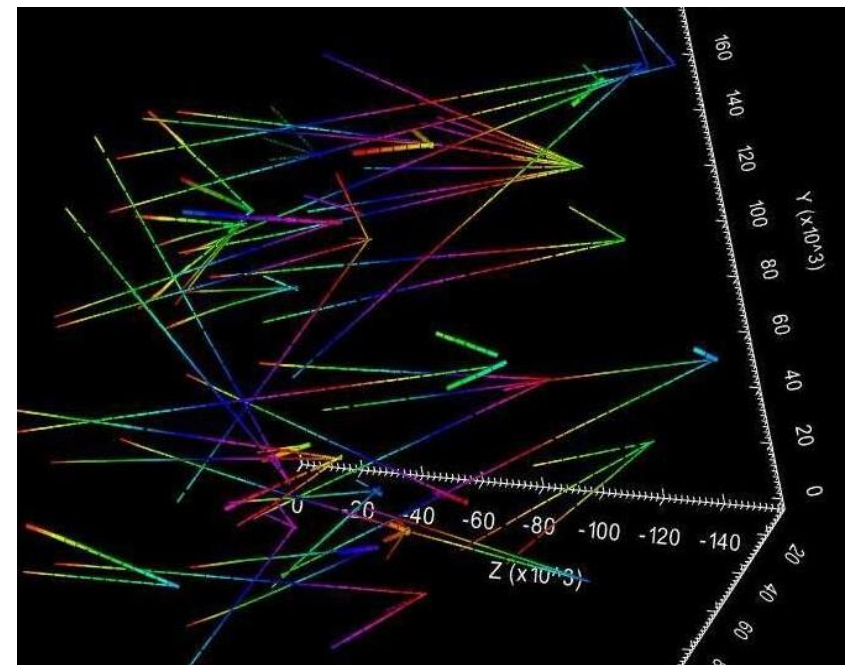
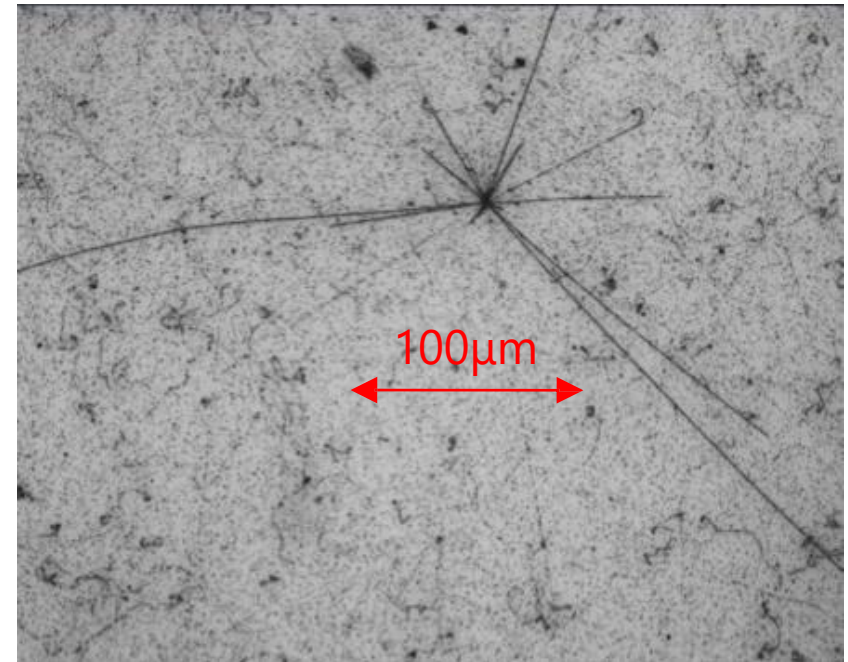
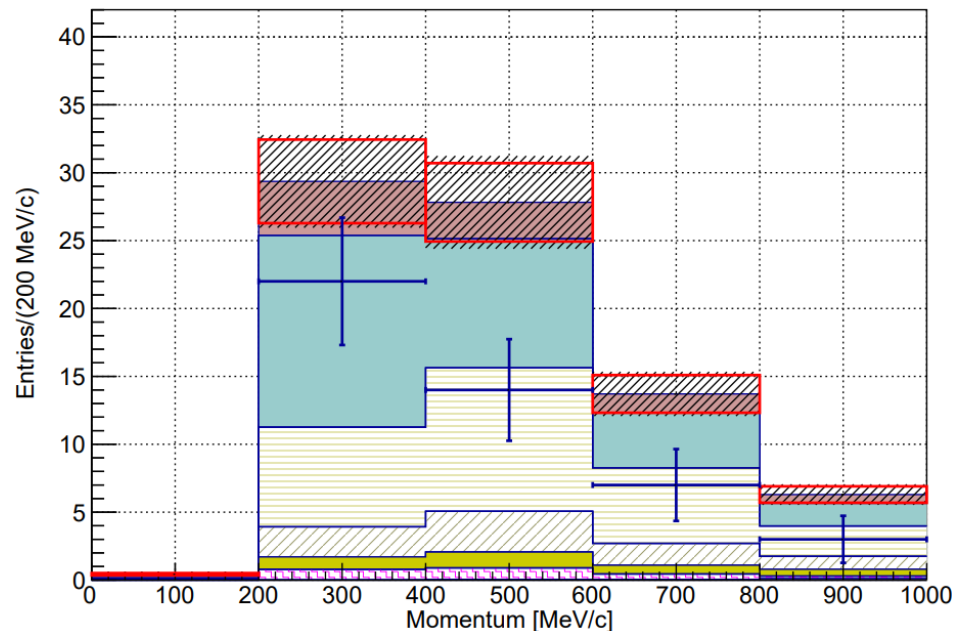
Super-FGD detector

- 2 million plastic scintillator cubes read out by fibers in three directions.
- 4π acceptance, low momentum threshold, ν_e/γ separation.



NINJA detector

- Nuclear emulsion detectors.
- Low momentum threshold for hadrons (~ 200 MeV/c for protons).
- Sensitive to 2p2h or nuclear effect.



Toward Hyper-Kamiokande

- Development of water-based liquid scintillator for the precise measurement of neutrino interaction on water.
- Unfolding using machine learning for multi-differential cross section analyses. (Collaboration with LBNL.)

