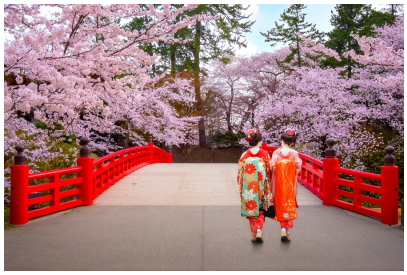

ID de Contribution: **84** Type: **Non spécifié**

Modeling the cooling water of the magnetic horn system in the T2K neutrino beam line using image analysis for the improvement of the neutrino flux estimation

T2K is a long baseline neutrino oscillation experiment and search for CP violation in leptons using neutrino oscillation.For improving the result, it is very important to consider about the neutrino flux in Super Kamiokande (SK). Neutrino flux estimation is using neutrino beam simulation and one of the largest effects of the flux uncertainty is the cooling water for the magnetic horn : the device to focus pions for making neutrino beam. To estimate the water distribution in more detail from current estimation, we made the horn's mock-up and measured the water thickness with image analysis. As the method of image analysis, Edge detection is used in this study. We talk mainly about how to estimate the water distribution with the image analysis in the session.

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