

Construction of a new scintillation tracker in T2K experiment

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In the T2K experiment, new detectors are going to be installed to the near detector. Super-FGD is one of them and a tracker which consists of 2 millions plastic scintillator cubes. 60 thousands wave length shifting fibers will be inserted to the cubes to lead scintillation light and it will be detected by SiPMs.

I will report the procedure to construct and install this detector.

The first step of construction is to insert fibers to the cubes.

This work should be done quickly because we have the 60 thousands fibers.

Our concern about it is that inserted fibers can be damaged by distortion of array of cubes and we have to check the quality of fibers during inserting the fibers.

I will also talk about a dedicated system for the fiber quality check.

Attendance type

In-person presentation

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