

TITUS: Introduction to the Intermediate Detector and Physics

Saturday 31 January 2015 09:00 (30 minutes)

The Tokai Intermediate Tank with Unoscillated Spectrum (TITUS) is a proposed new near detector for the Hyper-Kamiokande beam programme. The baseline design for TITUS features a 2 ktonne water Cherenkov (WC) detector at a distance of ~2 km from the J-PARC neutrino beam. TITUS is a 'next-generation' WC detector, including technological advances such as gadolinium-loading, and LAPPD photosensors. In addition, the detector will be partially enclosed by a magnetised muon range detector. This talk introduces the nominal design of TITUS, and details the physics potential of its WC component.

Length (min.) request (including discussion time)

30 minutes (including 5 minutes of discussion time)

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