ID contributo: **646** Tipo: **Plenary talk**

Hyper-Kamiokande

martedì 18 giugno 2024 09:50 (20 minuti)

The Hyper-Kamiokande project (Hyper-K) comprises a large water Cherenkov detector, an order of magnitude larger than Super-Kamiokande, equipped with photosensors, electronics, and daq with higher capabilities, and a neutrino beam created with a MegaWatt-class beamline at the J-PARC accelerator complex. The main physics goals of Hyper-K are the discovery of CP violation in the lepton sector, precise measurements of neutrino oscillation parameters, observation of nucleon decay, and the study of neutrinos from astrophysical origins. Toward its commissioning in 2027, facility construction of the far detector, the Hyper-K detector, is progressing on time. Excavation of the dome part of the largest cavern, with a diameter of 69 m, and the design of the water tank and photosensor support structure have been completed. Preparation of Hyper-K detector components and near detectors including a new intermediate water Cherenkov detector (IWCD) is ongoing. This talk will cover the physics goals and the status of construction.

Poster prize

Given name

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Collaboration (if any)

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Classifica Sessioni: S4: 3 flavour neutrino oscillations 2