

Status of Indian Based Neutrino Observatory

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India-based Neutrino Observatory (INO) project is one of the biggest basic science projects initiated by large number of collaborating groups within India and supported by the Government of India. The project aims to construct a cavern complex deep under the mountains with rock cover around 3500 Mwe, accessed by a 2 km long tunnel. The magnetized Iron Calorimeter, consisting of 50 kTons of steel plates embedded with 30000 Resistive Plate Chambers, will be used to study the properties of neutrinos. The cavern complex will house several other experiments like neutrino-less double decay and dark matter searches which require low background environment.

The talk will summarize the latest status of the project in terms of various efforts being put by the collaborators in building the civil infrastructure, magnet, RPCs, electronics and data acquisition systems etc. In addition detector simulation studies will also be discussed in the light of expected physics observables.

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