



Project: India-based Neutrino Observatory (INO)

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Abstract:

- India-based Neutrino Observatory (INO) is a mega science project approved by the Govt. of India for carrying out front ranking experiments in the field of neutrino physics and dark matter in an underground laboratory. The proposed detector is a 50 kiloton magnetised tracking Calorimeter (ICAL) with Resistive Plate Chambers (RPCs) as the active particle trackers. Indian industry is expected to be involved in fabricating various components like RPCs, Electronic Data Acquisition Systems, High Voltage Systems, Monitoring and Control Systems etc. for this project. In this talk, I propose to give a brief description of various detector components of ICAL and then discuss its physics potential, opportunities for Indian Industry and various spin offs.

About the Speaker:

- Prof. Naba K Mondal, an internationally known particle physicist, is currently DAE Raja Ramanna Fellow at Saha Institute of Nuclear Physics, Kolkata. He has made key contributions in the Kolar Gold Fields (KGF) Proton Decay Experiment. He was a member of DZERO experiment at Fermilab and CMS experiment at CERN and was involved in the discovery top quark and the Higgs boson. He led the India-based Neutrino Observatory Project (INO) from its inception till 2016. He is a fellow of all three science academies of India and was a J.C. Bose National Fellow. He is also a fellow of the World Academy of Sciences for the Advancement of Science in Developing Countries (TWAS) and recipient of Esther Hoffman Beller Endowment Lecture Award from American Physical Society. He has been awarded D.Sc. (h.c.) by University of Burdwan.

