



**TIFR/IUPAP Homi Bhabha Medal and prize awarded to  
Prof. Takaaki Kajita**

Prof. Takaaki Kajita has been awarded the TIFR-IUPAP Homi Bhabha Medal and Prize due to his outstanding contributions in the discovery of neutrino oscillations through observations of atmospheric neutrinos and several other path-breaking contributions in the field of Astroparticle physics. He discovered that the theoretical models could not explain the ratio of atmospheric muon neutrino to electron neutrino events in the Kamiokande experiment. He pioneered the development of particle identification in water by Cherenkov ring imaging technique, which led to the discovery of oscillation of atmospheric neutrinos. Neutrino oscillations were an unexpected, and possibly the greatest discovery of the past half-century, as evidenced by the award of Nobel Prize in 2015. This discovery had a huge impact on our understanding of cosmology, cosmic ray and particle physics, and opened doors in many other scientific fields.

Prof. Kajita currently leads the KAGRA a large cryogenic gravitational wave detector and the next generation neutrino detector Hyper-K, both located in Japan. He co-chairs the International Neutrino Panel with experts from nuclear-, high-energy and cosmic ray physics, created by the IUPAP that is tasked with the responsibility to identify the next generation of experiments to measure the properties of neutrinos. He is an adjunct member of the IUPAP Commission on Astroparticle Physics (C4). He is the Director of the Institute for Cosmic Ray Research, the University of Tokyo, and his contributions in the field of cosmic ray physics are not just important but have been path-breaking.