



Project: India-based Neutrino Observatory (INO)

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Neutrinos: a new window to the universe



Abstract:

- Neutrinos are elementary particles, but quite elusive. They are the second most abundant particles in the universe, and trillions of them pass through us every second without us even realizing it. At the same time, they help the sun shine, make stars explode, and allow us to see places from where light cannot reach us. The exploration of neutrino mass patterns would give us clues about mechanisms of mass generations, which are beyond the Standard Model of particle physics. On the other hand, observations of neutrinos from the sky can inform us about important astrophysical phenomena, sometimes even before the light reaches us!

About the Speaker:

- Dr. Amol Dighe is a professor at the Tata Institute of Fundamental Research (TIFR), working in the area of high energy physics and astro-particle physics. His aims to understand the nature of fundamental interactions by studying properties of elementary particles. He obtained his B.Tech. from IIT Bombay, and Ph.D. from University of Chicago. He is a Fellow of Indian Academy of Sciences and Indian National Science Academy. He is the recipient of Swarnajayanti Fellowship (DST), Shanti Swarup Bhatnagar Award (CSIR), and the Distinguished Alumnus Award of IIT Bombay. He has written numerous popular science articles in newspapers and magazines.

