

A JOURNEY IN NUCLEAR PHYSICS AND ITS INTERSECTIONS WITH HIGH ENERGY PHYSICS



Prof. Vivek Datar
(Raja Ramanna Fellow, DAE)

I describe my journey in low energy nuclear physics, with examples from experiments at the Van de Graaff laboratory, Mumbai, the VECC cyclotron at Kolkata and then at the tandem accelerator labs at Mumbai and Delhi. I will also talk about work that is of interest to high energy physics and including that associated with the INO project. I conclude with some recent work on the use of a deuterated liquid scintillator for solar and supernova neutrinos.

Dr. Vivek Datar is presently a Raja Ramanna Fellow at the Institute of Mathematical Sciences, Chennai. He was the Project Director of the India based Neutrino Observatory (INO) between 2016 and 2020 and a Senior Professor at the Tata Institute of Fundamental Research (TIFR), Mumbai from May 2015- May 2020. Before moving to TIFR he was a Distinguished Scientist and Head of the Nuclear Physics Division (NPD), Bhabha Atomic Research Centre (BARC) having served there between 1975 and 2015. He was a Senior Professor of the Homi Bhabha National Institute (HBNI) and Dean-Academic for Physical and Mathematical Sciences, BARC. He has also been an adjunct professor at the School of Natural Sciences, TIFR. He obtained his PhD from the University of Mumbai in 1983 and did post-doctoral work at IPN, Orsay, France and SUNY (Stony Brook), USA (1986-88). He joined NPD, BARC in 1975 after a year at the BARC Training School. His areas of interest include low energy nuclear physics and neutrino physics. His hobbies include bird watching, visiting wildlife sanctuaries, listening to classical music, bicycling, trekking and reading.



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Lecture Theatre AG 66, TIFR

YouTube Live:

<https://youtube.com/live/9E5A0Z4ztW4?feature=share>