Tata Institute of Fundamental Research

Homi Bhabha Road, Colaba, Mumbai, INDIA, 400005

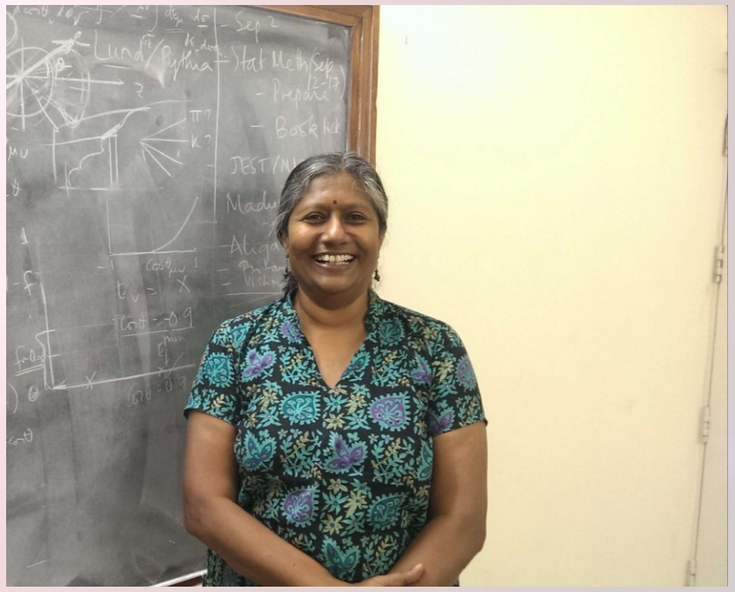
ASET Colloquium

Why strong interactions are important to study?

Protons and neutrons inside nuclei are held together by strong interactions between their constituent quarks and gluons. But these objects can never be seen alone, their presence can only be inferred. Even when they are produced in interactions, they quickly "dress" to form hadrons like pions and protons. I start with a simple introduction to the subject and then highlight some crucial ways in which their knowledge is indispensable in the study of other elementary particles.

Prof. Indumathi D. (Institute of Mathematical Sciences, Chennai)

Prof. Indumathi did her masters in Physics from the Madras Christian College, Chennai and Ph.D. from IMSc, where she worked on the spin structure of the proton. Following her postdoctoral appointments at Physical Research Laboratory (PRL), Ahmedabad, the University of Dortmund in Germany, and then a brief stay at the Indian Institute of Science, Bengaluru, she was appointed a faculty member at Harish Chandra Research Institute, Allahabad. She returned to IMSc in 1998. Indumathi's primary area of research is high energy physics phenomenology. Her research interests include work on atmospheric and solar neutrinos, nucleon and nuclear structure functions, inclusive hadron production at colliders and QCD at finite temperature. She has been an active member of the Indian Neutrino Observatory (INO) project since its inception.



Venue, Date & Time: ONLINE, Friday, 23rd December 2022, 4 pm

YouTube live-stream link: https://youtube.com/live/Ds0AxrXR8DQ?feature=share