

TAA Public Lecture

Quest for the structure of matter and its spin-offs

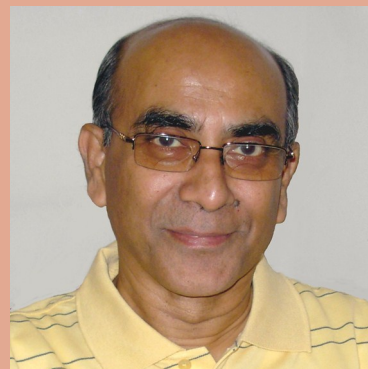
Prof. Amit Roy

Date & Time: 27th February 2015 at 5 p.m.

Venue: Lecture Theatre (AG-66), TIFR, Mumbai

Abstract:

Ever since humans started thinking, they wanted to know the nature of things around. One way to understand objects is to see whether the object can be made out of smaller parts. These small parts can then be combined in different ways to form all the objects around us. Carrying on with this quest led to the discovery of molecules, atoms, electrons, nucleus, protons, neutrons, quarks, etc., which at different times were thought to be elementary particles or building blocks of matter. How were they found? How small are these objects? Is there a limit to our looking at smaller objects? This enterprise has been a heroic one and has extended our horizons to undreamt of levels. Although it has been a curiosity driven pursuit, this has led to many technological spin-offs of practical benefit to the society. I shall try to give an overview of this quest in this lecture.



Speaker:

Amit Roy completed his M.Sc from Delhi University in 1968 and his Ph.D from Tata Institute of Fundamental Research, Mumbai in 1975, where he continued as faculty till 1990. He has worked at Florida State University, USA, KVI, Netherlands and Argonne National Laboratory, USA. He joined Inter-University Accelerator Centre in 1991 as senior scientist and was its director from 2001 till July 2013. Currently he is DAE Raja Ramanna Fellow at the Variable Energy Cyclotron Centre, Kolkata. He led the team for building the Superconducting Linac at IUAC and pioneered the development of Niobium superconducting cavities in India.

He is a Fellow of the National Academy of Sciences, India. His research interests are in the area of Nuclear Physics, Accelerator Physics and Atomic Physics. He is interested in science communication and has written the Great Experiments series in Journal of Science Education "Resonance".

All are Welcome

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