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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Colloquium

Title : The Mysterious Magnetic Personality of Our Sun

Speaker : Arnab Rai Choudhuri, Indian Institute of Science, Bangalore

Date : Monday, May 1, 2017

Time : 3:00 pm

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : The Sun is the first astronomical object in which magnetic fields were discovered in 1908 by using the Zeeman effect. Even before this discovery of magnetic fields in sunspots, it was known that there is a 11-year cycle of sunspots, which could be identified as the magnetic cycle of the Sun after this discovery. The magnetic field of the Sun is also behind many other phenomena, such as the violent explosions known as solar flares, the corona much hotter than the solar surface and the solar wind. Only within the last few decades, major developments in plasma physics and magnetohydrodynamics (MHD) have at last provided a broad framework for the theoretical understanding of these phenomena connected with the solar magnetic fields. I shall give a general introduction to this field - with some emphasis on the research interests of our group. A more detailed account of this field can be found in my recently published popular science book:

<http://www.amazon.in/Natures-Third-Cycle-Story-Sunspots/dp/0199674752/>