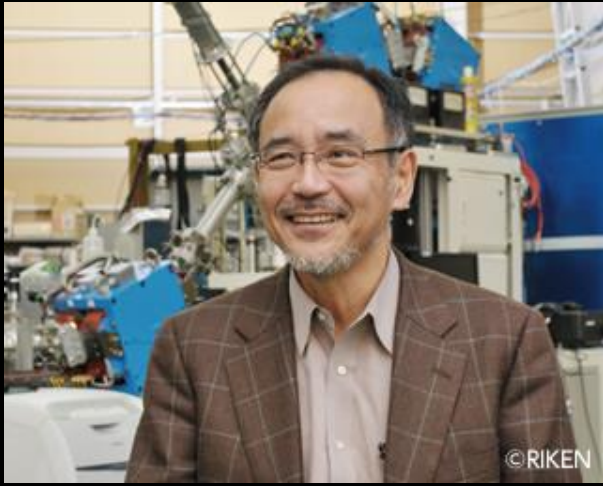
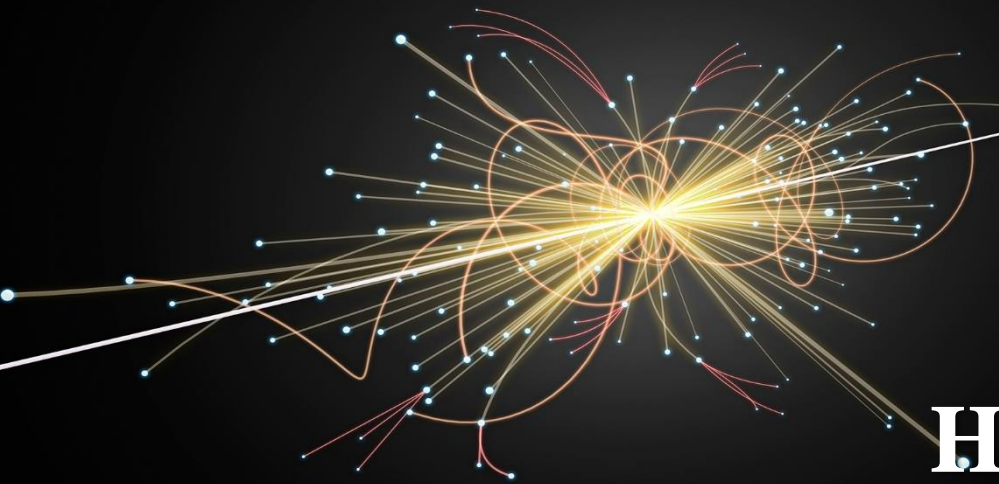


Antimatter and us



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Public Lecture

Homi Bhabha Auditorium

Friday, 7th Dec. 2018, 4:15 p.m.

Organized by

13th Asian International Seminar on Atomic and molecular Physics

Conference Chair: **Prof. Lokesh Tribedi**

One of the most puzzling findings to emerge from modern physics is the existence of antimatter. The production of even simplest form of antimatter, antihydrogen, in laboratory is an extremely challenging task. The antimatter not only interests atomic physicists but scientists in general as its existence is at the heart of some of the most challenging unsolved problems in science. One the major purposes of the antimatter research is to study fundamental structure of our universe via precise comparison of various properties of matter and antimatter, which allows us to test the charge, parity, and time reversal (CPT) symmetry. Another important and interesting purpose is to study the Weak Equivalence Principle (WEP) employing interaction between matter and antimatter. Such research would potentially provide essential information on the big mystery, how and why our matter universe survived escaping from full annihilation with antimatter, which is not explained by the Standard Model of elementary particle physics. We discuss here various challenges to study fundamental questions described above using the simplest and stable antimatter, antihydrogen.

Talk is open to all.

Non TIFR members are requested to carry valid photo ID card

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