INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A&B, Raja S.C. Mullick Road, Jadavpur, Kolkata-700032, India

Seminar Notice

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Theoretical Physics Department

Title:	**Not a jet all the way: discovery prospects using substructure**
Speaker:	**Deepak Kar,University of Witwatersrand, South Africa**
Date:	**January 05,2017 (Thursday)**
Time:	**03:30 p.m.**
Venue:	**Theoretical Physics Seminar Room (R/No.-C406), 3rd Floor, Centenary Building, IACS**
Abstract:	Jets are the collimated bunches of hadrons measured in our detectors, created at high energy particle collisions. As we go to higher energies at the Large Hadron Collider (LHC), Higgs bosons, or yet undiscovered heavy particles are produced with very high energy and the decay products from these "boosted" particles tend to be contained in jets that are spread over a larger area. The internal structure of these jets is exploited to identify the original particles that have decayed into these jets. In this seminar, I will motivate the use of substructure techniques for probing new physics at the LHC. I will then discuss the recent experimental results on substructure measurements, and substructure based searches.

All are cordially invited to attend the seminar