

Colloquium on Jet physics and a lecture-tutorial session on Monte Carlo generators and Rivet on 11th and on 12th January at IOP. The details are given below.

**:Colloquium:**

**Speaker:** Dr. Deepak Kar ( University of Witwatersrand, Johannesburg)

**Date and time :** 11/01/2018, 4 pm

**Tea:** 3.45 pm

**Venue:** IOP main building lecture hall

**Title:** Not a jet all the way: discovery prospects using substructure

**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 talk, 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.

**:Lecture+Tutorial:**

**Tutorial:** Hand-on introduction to Monte Carlo generators and Rivet

**Speaker:** Dr. Deepak Kar ( University of Witwatersrand, Johannesburg)

**Date and time:** 12/01/2018, 11 pm- 1 pm, 2.30 pm-4 pm

The following link can be used to download and set up the virtual machine required for this session

<http://dkar.web.cern.ch/dkar/tutorial/>

If you would like to attend the tutorial session on 12th, kindly drop a confirmation e-mail.

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