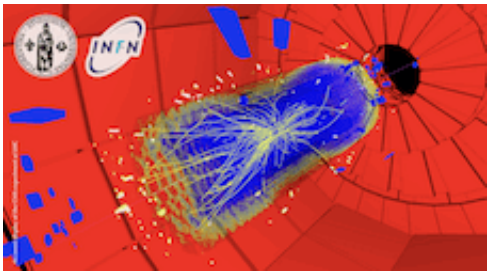

Contribution ID: **32** Type: **Talk**

Performance of the CMS Silicon Tracker

Wednesday, 6 July 2011 10:30 (20 minutes)

The CMS tracker is the largest silicon detector ever built, covering 200 square meters and providing an average of 14 high-precision measurements per track. Data from proton-proton collisions at a center-of-mass energy of 7 TeV are used to measure the performance of the detector and the reconstruction algorithms. The resolution and efficiency of the track, vertex, and beam line reconstruction are measured in data and compared to the results from simulation. An example of the culmination of this effort is shown in the performance of the b-tagging algorithms, critical to many physics analyses at CMS.

Primary author: Mr CHAN, Matthew (Massachusetts Institute of Technology)

Presenter: Mr CHAN, Matthew (Massachusetts Institute of Technology)

Session Classification: DAY 1

Track Classification: Tracking Systems