Prof.Tony Cass

Tittle : "Worldwide Data Distribution, Management and Analysis for the LHC Experiments

Abstract:

Although extremely successful, the Standard Model of Particle Physics lacks definitive answers to key issues such as the origin of mass, the nature of Dark Matter in the Universe and precise details of the asymmetry between matter and anti-matter. The Large Hadron Collider at CERN has been constructed to address these issues and the four major experiments-ALICE, ATLAS, CMS and LHCb-are expected to generate some 15-25PB of data per year. After an initial introduction to Particle Physics, CERN and the LHC experiments, the talk will describe the Worldwide LHC Computing Grid that has been established to enable the effective distribution and analysis of these unprecedented data volumes, in particular reporting on the successes of the first year of LHC operation and on some possible future developments