DIPARTIMENTO DI FISICA "E.Fermi"
UNIVERSITÀ DI PISA
CORSO DI DOTTORATO IN FISICA
Largo B.Pontecorvo, 3 - Edificio B-C
56127 PISA - ITALY

DIPARTIMENTO DI FISICA E. Fermi
UNIVERSITA' D1 PISA

SEMINARIO

Mercoledi 11 Marzo 2009
ore 11.00
INFN - Sezione di Pisa
L.go B.Pontecorvo, 3 - Edificio C
Aula 131 (Piano Terra)

dott. Peter Loch
INFN Pisa & University of Arizona
terrà un seminario dal titolo:

The Standard Model Hadronic Final States in ATLAS

Abstract: The ATLAS experiment at the Large Hadron Collider (LHC) will explore new kinematic domains in proton-proton collisions at a center-of-mass energy of 14 TeV. The validity of the Standard Model QCD in these regions can be determined by precision reconstruction of the hadronic final state, mainly with multi-jet final states. In this talk a brief overview on the corresponding measurements, the expected precision limitations, and the possible access to proton structure and the strong coupling constant, are discussed. Strategies for the measurement of important Standard Model parameters like the top quark and W boson masses with ATLAS are shown with a focus on the contributions from jets and missing transverse energy to the experimental uncertainties. The effect of the experimental conditions at LHC, including the underlying event and multiple parton and proton interactions, are presented for selected final states.