Contribution ID : **89** Type : **Invited talk**

DETERMINATION OF THE FUNDAMENTAL PARAMETERS OF QUANTUM CHROMODYNAMICS

Thursday, 11 November 2010 09:00 (1:00)

Abstract content

Quantum Chromodynamics (QCD) is the currently accepted renormalizable quantum field theory that describes the strong interactions among quarks and gluons. The two fundamental parameters of QCD are the running coupling and the quark masses. Because of quark & gluon confinement these parameters cannot be measured in the same fashion as in non-confined theories like e.g. in Quantum Electrodynamics. A review will be presented of the various techniques to extract the values of the strong coupling and the quark masses from experimental data. Emphasis will be placed on recent progress in this vast field.

Summary

Primary author(s) : Prof. DOMINGUEZ, CESAREO (UNIVERSITY OF CAPE TOWN, DEPARTMENT OF PHYSICS)

Presenter(s) : Prof. DOMINGUEZ, CESAREO (UNIVERSITY OF CAPE TOWN, DEPARTMENT OF PHYSICS)

Session Classification : Plenary LHC.SM.BSM

Track Classification : LHC physics: Standard Model and Beyond