Contribution ID: **434** Type: **Oral Presentation**

Data analysis of W-boson in p-p and Pb-Pb collisions at LHC energies

Tuesday, 10 July 2012 11:00 (20 minutes)

Abstract content
   (Max 300 words)

The ALICE detector at the CERN-LHC is dedicated to studying the quark-gluon plasma (QGP), which is expected to be formed at extreme energy densities in heavy-ion collisions. The Muon Spectrometer covers the forward rapidity region (-4 < η < -2.5) and detects muons decaying from heavy-quarkonia states (e.g. J/Ψ) and W-boson which are hard, penetrating probes. They are essential tools for studying the initial conditions of the interaction and determining medium induced effects. Because of an increase in luminosity for LHC since 2011 it is now possible to study the high-pT region in ALICE. Data analyses of W-boson in the single muon decay channel in p-p (Pb-Pb) collisions at 7TeV (2.76TeV) are performed.

Apply to be
 consider for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD)?

MSc

Main supervisor (name and email)
and his / her institution

Dr. Z. Z. Vilakazi
iThemba LABS / University of Pretoria

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

Primary author: Mr DU TOIT, Pieter (University of Pretoria / iThemba LABS for the ALICE Collaboration)

Presenter: Mr DU TOIT, Pieter (University of Pretoria / iThemba LABS for the ALICE Collaboration)

Session Classification: NPRP

Track Classification: Track B - Nuclear, Particle and Radiation Physics