

High Energy Particle Physics Workshop 2017

Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction to Collider Physics

Wednesday 1 February 2017 10:20 (1h 30m)

Presenter: Dr KIM, Jong Soo (IBS)

Session Classification: Session I

Contribution ID: 2

Type: **not specified**

Astrophysical Constraints on Dark Matter

Wednesday 1 February 2017 11:50 (1 hour)

Presenter: Prof. COLAFRANCESCO, Sergio (University of the Witwatersrand)

Session Classification: Session I

Contribution ID: 3

Type: **not specified**

Overview of Experimental Techniques I

Wednesday 1 February 2017 14:00 (1h 30m)

Presenter: KNUE, Andrea Helen (Max-Planck-Institut fur Physik (DE))

Session Classification: Session II

Contribution ID: 4

Type: **not specified**

Overview of Experimental Techniques II

Thursday 2 February 2017 11:00 (1h 30m)

Presenter: KNUE, Andrea Helen (Max-Planck-Institut fur Physik (DE))

Session Classification: Session V

Contribution ID: 5

Type: **not specified**

Madgraph Tutorial

Thursday 2 February 2017 09:00 (1h 30m)

Presenter: Dr KIM, Jong Soo

Session Classification: Session IV

Contribution ID: 6

Type: **not specified**

Particle Physics in Space (Dark Matter and the LHC)

Thursday 2 February 2017 12:30 (30 minutes)

Presenter: Dr GEOFF Beck (University of the Witwatersrand)

Session Classification: Session V

Contribution ID: 7

Type: **not specified**

Performance of a resistive plate chamber equipped with a new prototype of amplified front-end electronics

Thursday 2 February 2017 14:00 (30 minutes)

Presenter: MARCHISONE, Massimiliano (University of the Witwatersrand (ZA))

Session Classification: Session VI

Contribution ID: 8

Type: **not specified**

Thermal Field Theory in Small Systems

Presenter: HOROWITZ, William (University of Cape Town)

Session Classification: Session VI

Contribution ID: 9

Type: **not specified**

Thermal Field Theory in Small System

Wednesday 1 February 2017 15:50 (30 minutes)

Presenter: HOROWITZ, William (University of Cape Town)

Session Classification: Session III

Contribution ID: **10**

Type: **not specified**

The anisotropy effect on jet using AdS/CFT Correspondence

Wednesday 1 February 2017 16:20 (15 minutes)

Presenter: MORAD, Razieh

Session Classification: Session III

Contribution ID: 11

Type: **not specified**

A pQCD sized problem in small systems

Wednesday 1 February 2017 16:35 (20 minutes)

Presenter: KOLBE, Isobel (University of Cape Town (ZA))

Session Classification: Session III

Contribution ID: 12

Type: **not specified**

Initial State Factorization and the Kinoshita-Lee-Nauenberg Theorem

Wednesday 1 February 2017 16:55 (15 minutes)

Presenter: Mr IBRAHIM, Abdullah Khalil Hassan (University of Cape Town)

Session Classification: Session III

Contribution ID: 13

Type: **not specified**

Measurement of visible cross sections at the LHC

Thursday 2 February 2017 14:30 (15 minutes)

Presenter: MHLANGA, Sibaliso (University of Cape Town (ZA))

Session Classification: Session VI

Contribution ID: 14

Type: **not specified**

AdS/CFT predictions for partonic and fragmented momentum, azimuthal, and rapidity correlations of heavy flavors in heavy ion collisions

Thursday 2 February 2017 14:45 (15 minutes)

Presenter: HAMBROCK, Robert (University of Cape Town)

Session Classification: Session VI

Contribution ID: 15

Type: **not specified**

Computing the $q\bar{q}$ to $q\bar{q}$ cross section using BCFW on-shell recursion

Thursday 2 February 2017 15:00 (15 minutes)

Presenter: RABEMANANJARA, Tanjona Radonirina (CERN)

Session Classification: Session VI

Contribution ID: 16

Type: **not specified**

Evolution of gauge couplings and Weinberg angle in 5-dimension for G2 gauge group

Thursday 2 February 2017 15:15 (15 minutes)

Presenter: Mr KHOJALI, Mohammed Omer (University of the Witwatersrand)

Session Classification: Session VI

Contribution ID: 17

Type: **not specified**

Absorption probabilities and QNMs associated with spin-3/2 particles near N-dimensional Schwarzschild black holes

Thursday 2 February 2017 16:05 (15 minutes)

Presenter: HARMTSEN, Gerhard (University of the Witwatersrand)

Session Classification: Session VII

Contribution ID: 18

Type: **not specified**

Quasinormal modes for a spin-3/2 field in a 4-dimensional Reissner-Nordstrom background

Thursday 2 February 2017 16:20 (15 minutes)

Presenter: Mr NGCOBO, Xolane (University of the Witwatersrand)

Session Classification: Session VII

Contribution ID: 19

Type: **not specified**

Two Higgs doublet model in future colliders

Thursday 2 February 2017 16:35 (15 minutes)

Presenter: MOSOMANE, Chuene Johannes (University of the Witwatersrand (ZA))

Session Classification: Session VII

Contribution ID: 20

Type: **not specified**

Studies of the b-tagged control region for same sign WW production in proton-proton collision data recorded by the ATLAS Detector

Thursday 2 February 2017 16:50 (15 minutes)

Presenter: VAN TONDER, Raynette (University of Cape Town (ZA))

Session Classification: Session VII

Contribution ID: 21

Type: **not specified**

The Madala hypothesis

Friday 3 February 2017 09:00 (15 minutes)

Presenter: KUMAR, Mukesh (University of the Witwatersrand (ZA))

Session Classification: Session VIII

Contribution ID: 22

Type: **not specified**

The Madala Hypothesis with Run I and Run II data at the LHC

Friday 3 February 2017 09:15 (15 minutes)

Presenter: VON BUDDENBROCK, Stefan Erich (University of the Witwatersrand (ZA))

Session Classification: Session VIII

Contribution ID: 23

Type: **not specified**

Physics with 4 leptons at the LHC

Friday 3 February 2017 09:30 (15 minutes)

Presenter: HERNANDEZ JIMENEZ, Yesenia (University of the Witwatersrand (ZA))

Session Classification: Session VIII

Contribution ID: 24

Type: **not specified**

Search for new physics with di-photon events with the ATLAS detector at the LHC

Friday 3 February 2017 09:45 (15 minutes)

Presenters: REED, Robert Graham (University of the Witwatersrand (ZA)); MOLUPE, Tshidiso Sydwell (University of the Witwatersrand (ZA))

Session Classification: Session VIII

Contribution ID: 25

Type: **not specified**

Search for Higgs in association with MET with the ATLAS detector

Friday 3 February 2017 10:00 (15 minutes)

Presenter: TOMIWA, Kehinde Gbenga (University of the Witwatersrand (ZA))

Session Classification: Session VIII

Contribution ID: 26

Type: **not specified**

The search for WW gamma gamma with the ATLAS detector

Friday 3 February 2017 10:15 (15 minutes)

Presenter: FADOL, Abdualazem

Session Classification: Session VIII

Contribution ID: 27

Type: **not specified**

A characterisation of the ATLAS ITk high rapidity modules in Allpix and EUTelescope

Friday 3 February 2017 10:50 (15 minutes)

Presenter: ATKIN, Ryan Justin (University of Cape Town (ZA))

Session Classification: Session IX

Contribution ID: 28

Type: **not specified**

High fluence neutron radiation of plastic scintillators for the Tile Calorimeter of the ATLAS detector

Friday 3 February 2017 11:05 (15 minutes)

Presenter: MDHLULI, Joyful Elma (University of the Witwatersrand (ZA))

Session Classification: Session IX

Contribution ID: 29

Type: **not specified**

Raman Spectroscopy analysis of plastic scintillators radiated with neutrons

Friday 3 February 2017 11:35 (15 minutes)

Presenter: TLOU, Humphry

Session Classification: Session IX

Contribution ID: 30

Type: **not specified**

Light yield studies with the plastic scintillators radiated with neutrons

Friday 3 February 2017 11:20 (15 minutes)

Presenter: MTHEMBU, Skhathisomusa (University of the Witwatersrand (ZA))

Session Classification: Session IX

Contribution ID: 31

Type: **not specified**

Low consumption RF devices and applications in system control

Friday 3 February 2017 11:50 (15 minutes)

Presenter: Mr VEN RENSBURG, Roger (University of the Witwatersrand)

Session Classification: Session IX

Contribution ID: 32

Type: **not specified**

Status of the TileCal phase-II upgrade Electronics

Friday 3 February 2017 12:05 (15 minutes)

Presenter: Mr HLALUKU, Dingane (University of the Witwatersrand (ZA))

Session Classification: Session IX

Contribution ID: 33

Type: **not specified**

Non abelian correction to the induced gluon radiation

Thursday 2 February 2017 15:50 (15 minutes)

Presenter: RASOANAIVO, Andriniaina Narindra (University of Cape Town)

Session Classification: Session VII

Contribution ID: 34

Type: **not specified**

Welcome from the Dean of the Faculty of Sciences

Wednesday 1 February 2017 09:00 (20 minutes)

Presenter: Prof. MARQUES, Helder (University of the Witwatersrand)

Session Classification: Opening Session

Contribution ID: 35

Type: **not specified**

Welcome from the Chair of the SA-CERN Consortium

Wednesday 1 February 2017 09:20 (20 minutes)

Presenter: CLEYMANS, Jean (University of Cape Town (ZA))

Session Classification: Opening Session

Contribution ID: 36

Type: **not specified**

Structure of the workshop

Wednesday 1 February 2017 09:40 (20 minutes)

Presenters: CORNELL, Alan; MELLADO GARCIA, Bruce (University of the Witwatersrand)

Session Classification: Opening Session