

# **5th School on LHC Physics - 2016**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## School Inauguration

*Monday 15 August 2016 09:00 (50 minutes)*

Contribution ID: 2

Type: **not specified**

## Introduction to Large Hadron Collider (LHC)

*Monday 15 August 2016 09:50 (50 minutes)*

**Presenter:** HOORANI, Hafeez (National Centre for Physics (PK))

**Track Classification:** Introduction to Large Hadron Collider (LHC) and Compact Muon Solenoid (CMS) Experiment

Contribution ID: 3

Type: **not specified**

## Introduction to CMS Experiment

**Presenter:** CAMPORESI, Tiziano (CERN)

Contribution ID: 4

Type: **not specified**

# Introduction to Standard Model of Particle Physics - I

*Monday 15 August 2016 14:00 (50 minutes)*

Electromagnetic and weak interactions

**Presenter:** ASLAM, Jamil (Quaid-e-Azam University, Islamabad)

**Track Classification:** Electromagnetic and weak interactions

Contribution ID: 5

Type: **not specified**

## **Cross Section Measurement of Single Top Quark Using CMS data at the LHC**

*Wednesday 17 August 2016 09:00 (50 minutes)*

**Presenter:** REZAEI HOSSEINABADI, Ferdos (Institute for Research in Fundamental Sciences (IR))

Contribution ID: 6

Type: **not specified**

## Introduction to Standard Model Physics - 2

**Presenter:** Dr ASLAM, Jamil

Contribution ID: 7

Type: **not specified**

# Introduction to CMS Calorimetry System - I

*Wednesday 17 August 2016 14:00 (50 minutes)*

**Presenter:** PARAMATTI, Riccardo (INFN - Rome I)



Contribution ID: 8

Type: **not specified**

## Higgs Boson and Beyond - 1

**Presenter:** ELLIS, Jonathan R. (University of London (GB))

Contribution ID: 9

Type: **not specified**

## Symmetries in Particle Physics - I

**Presenter:** HOORANI, Hafeez (National Centre for Physics (PK))

Contribution ID: **10**

Type: **not specified**

## **Introduction to CMS Calorimetry System - II**

*Thursday 18 August 2016 09:00 (50 minutes)*

**Presenter:** PARAMATTI, Riccardo (INFN - Rome I)

Contribution ID: **11**

Type: **not specified**

## **Introduction to CMS Calorimetry System - III**

*Thursday 18 August 2016 11:10 (50 minutes)*

**Presenter:** PARAMATTI, Riccardo (INFN - Rome I)

Contribution ID: 12

Type: **not specified**

## Introduction to Standard Model Physics - II

*Tuesday 16 August 2016 09:00 (50 minutes)*

**Presenter:** ASLAM, Jamil (Quaid-e-Azam University, Islamabad)

Contribution ID: 13

Type: **not specified**

## Introduction to CMS Calorimetry System - III

**Presenter:** Dr ASLAM, Jamil (Quaid-e-Azam University, Islamabad)

Contribution ID: **14**

Type: **not specified**

## **Symmetries in Particle Physics - I**

**Presenter:** HOORANI, Hafeez (National Centre for Physics (PK))

Contribution ID: 15

Type: **not specified**

## Introduction to Experimental Particle Physics - III

*Tuesday 16 August 2016 14:50 (50 minutes)*

**Presenter:** AHMAD, Ashfaq (National Centre for Physics (PK))



Contribution ID: **16**

Type: **not specified**

## **Evolution of Physics and Its Impact on Society**

*Monday 15 August 2016 11:10 (50 minutes)*

**Presenter:** FAYYAZUDDIN (National Centre for Physics, Islamabad)

Contribution ID: 17

Type: **not specified**

# Quantum Chromodynamics (QCD) - I

*Friday 19 August 2016 12:00 (50 minutes)*

**Presenter:** BILAL MASOOD (Centre for High Energy Physics, Punjab University, Lahore)

Contribution ID: **18**

Type: **not specified**

# Top Quark Physics and Collider Phenomenology

*Wednesday 17 August 2016 09:50 (50 minutes)*

**Presenter:** KHATIBI, Sara (School of Particles and Accelerator Inst. for Res. in Fundam. S)

Contribution ID: **19**

Type: **not specified**

# **Introduction to Standard Model of Particle Physics - IV**

*Wednesday 17 August 2016 11:10 (50 minutes)*

**Presenter:** JAMIL ASLAM

Contribution ID: 20

Type: **not specified**

## Quantum Chromodynamics (QCD) - IV

*Thursday 18 August 2016 09:50 (50 minutes)*

**Presenter:** FAISAL AKRAM (Centre for High Energy Physics, Punjab University, Lahore)

Contribution ID: 21

Type: **not specified**

## ALICE Detector at LHC

*Tuesday 16 August 2016 11:10 (50 minutes)*

**Presenter:** BASHIR BUTT, Jamila (COMSATS Institute of Information Technology (PK))

Contribution ID: 22

Type: **not specified**

## Introduction to Experimental Particle Physics - II

*Tuesday 16 August 2016 14:00 (50 minutes)*

**Presenter:** AHMAD, Ashfaq (National Centre for Physics (PK))

Contribution ID: 23

Type: **not specified**

## Lab - 1 (Linux)

*Monday 15 August 2016 14:50 (50 minutes)*

**Presenter:** SHARJEEL (NCP, Islamabad)



Contribution ID: 24

Type: **not specified**

## Lab - 2 (Linux and vi editor)

*Tuesday 16 August 2016 16:10 (50 minutes)*

**Presenter:** SHARJEEL (NCP, Islamabad)

Contribution ID: 25

Type: **not specified**

## Introduction to Experimental Particle Physics - III

**Presenter:** AHMAD, Ashfaq (National Centre for Physics (PK))

Contribution ID: 26

Type: **not specified**

## Ttbar Measuremnts at CMS Detector - I

*Tuesday 16 August 2016 09:50 (50 minutes)*

**Presenter:** NASERI, Mohsen (Institute for Research in Fundamental Sciences (IR))

Contribution ID: 27

Type: **not specified**

# Introduction to Standard Model of Particle Physics - III

*Tuesday 16 August 2016 12:00 (50 minutes)*

**Presenter:** JAMIL ASLAM (Quaid-i-Azam University, Islamabad)

Contribution ID: 28

Type: **not specified**

# Introduction to Experimental Particle Physics - I

*Monday 15 August 2016 12:00 (50 minutes)*

**Presenter:** AHMAD, Ashfaq (National Centre for Physics (PK))

Contribution ID: 29

Type: **not specified**

# Introduction to Standard Model of Particle Physics - III

**Presenter:** Mr JAMIL ASLAM (Quaid-i-Azam University, Islamabad)

Contribution ID: **30**

Type: **not specified**

# Introduction to Standard Model of Particle Physics - V

*Wednesday 17 August 2016 14:50 (50 minutes)*

**Presenter:** JAMIL ASLAM

Contribution ID: **31**

Type: **not specified**

# **Introduction to Standard Model of Particle Physics - IV**

*Thursday 18 August 2016 12:00 (50 minutes)*

**Presenter:** JAMIL ASLAM (Quaid-i-Azam University, Islamabad)



Contribution ID: 32

Type: **not specified**

## Ttbar Measuremnts at CMS Detector - II

*Friday 19 August 2016 09:00 (50 minutes)*

**Presenter:** NASERI, Mohsen (Institute for Research in Fundamental Sciences (IR))

Contribution ID: 33

Type: **not specified**

## **Jet/MET Identification and Reconstruction at CMS Detector**

*Thursday 18 August 2016 14:00 (50 minutes)*

**Presenter:** AZZURRI, Paolo (Universita di Pisa & INFN (IT))

Contribution ID: 34

Type: **not specified**

## Introduction to Higgs and Beyond - I

*Thursday 18 August 2016 14:50 (50 minutes)*

**Presenter:** ELLIS, Jonathan R. (University of London (GB))

Contribution ID: 35

Type: **not specified**

## Introduction to Higgs and Beyond - II

*Friday 19 August 2016 14:50 (50 minutes)*

**Presenter:** ELLIS, Jonathan R. (University of London (GB))

Contribution ID: **36**

Type: **not specified**

## **Introduction to CMS Calorimetry System - IV**

*Friday 19 August 2016 09:50 (50 minutes)*

**Presenter:** PARAMATTI, Riccardo (INFN - Rome I)

Contribution ID: 37

Type: **not specified**

## Single Top Measurement at CMS Detector - I

**Presenter:** REZAEI HOSSEINABADI, Ferdos (Institute for Research in Fundamental Sciences (IR))

Contribution ID: **38**

Type: **not specified**

## Single Top Measurement at CMS Detector - II

*Monday 22 August 2016 09:50 (50 minutes)*

**Presenter:** REZAEI HOSSEINABADI, Ferdos (Institute for Research in Fundamental Sciences (IR))

Contribution ID: 39

Type: **not specified**

## Introduction to Supersymmetry - II

**Presenter:** BABAR QURESHI (LUMS, Lahore)



Contribution ID: 40

Type: **not specified**

# Introduction to Supersymmetry - I

*Monday 22 August 2016 12:00 (50 minutes)*

**Presenter:** BABAR QURESHI (LUMS, Lahore)

Contribution ID: 41

Type: **not specified**

## Monte Carlo Simulations

*Tuesday 23 August 2016 11:10 (50 minutes)*

**Presenter:** YASIN, Zafar (PINSTECH, Islamabad)

Contribution ID: 42

Type: **not specified**

## Single Top Physics

*Friday 19 August 2016 11:10 (50 minutes)*

**Presenter:** REZAEI HOSSEINABADI, Ferdos (Institute for Research in Fundamental Sciences (IR))

Contribution ID: 43

Type: **not specified**

## Searches of new physics with boosted objects

*Monday 22 August 2016 09:00 (50 minutes)*

**Presenter:** KHALIL, Sadia (The University of Kansas (US))

Contribution ID: 44

Type: **not specified**

## Phenomonology of Top Quark - I

*Monday 22 August 2016 11:10 (50 minutes)*

**Presenter:** KHATIBI, Sara (School of Particles and Accelerator Inst. for Res. in Fundam. S)

Contribution ID: 45

Type: **not specified**

# Introduction to Top Quark Physics - I

*Monday 22 August 2016 14:00 (50 minutes)*

**Presenter:** MULLER, Thomas (KIT - Karlsruhe Institute of Technology (DE))

Contribution ID: 46

Type: **not specified**

## Introduction to Top Quark Physics - II

*Tuesday 23 August 2016 14:00 (50 minutes)*

**Presenter:** MULLER, Thomas (KIT - Karlsruhe Institute of Technology (DE))

Contribution ID: 47

Type: **not specified**

## Beyond Standard Model

*Monday 22 August 2016 14:50 (50 minutes)*

**Presenter:** DE ROECK, Albert (CERN)



Contribution ID: 48

Type: **not specified**

## Status of SUSY Searches at the LHC

*Tuesday 23 August 2016 12:00 (50 minutes)*

**Presenter:** DE ROECK, Albert (CERN)

Contribution ID: 49

Type: **not specified**

## Status of Dark Matter Searches at LHC

*Tuesday 23 August 2016 14:50 (50 minutes)*

**Presenter:** DE ROECK, Albert (CERN)

Contribution ID: 50

Type: **not specified**

## Zafar Yasin

**Presenter:** ZAFAR YASEEN

Contribution ID: 51

Type: **not specified**

## Shakeel Ahmad

**Presenter:** SHAKEEL AHMAD

Contribution ID: 52

Type: **not specified**

## Phenomonology of Top Quark - II

**Presenter:** KHATIBI, Sara (School of Particles and Accelerator Inst. for Res. in Fundam. S)

Contribution ID: 53

Type: **not specified**

## SUSY

*Wednesday 24 August 2016 09:00 (1h 40m)*

**Presenter:** KHALID, Rizwan

Contribution ID: 54

Type: **not specified**

## Cloud Computing

*Wednesday 24 August 2016 11:10 (50 minutes)*

**Presenter:** AHMAD, Shakeel

Contribution ID: 55

Type: **not specified**

## ROOT - I (Intro, Basics and Functions)

*Wednesday 24 August 2016 12:00 (50 minutes)*

**Presenter:** SADDIQUE, Asif (National Centre for Physics (PK))



Contribution ID: 56

Type: **not specified**

## ROOT - II (Histogram Operations)

*Wednesday 24 August 2016 14:00 (1h 40m)*

**Presenter:** SADDIQUE, Asif (National Centre for Physics (PK))

Contribution ID: 57

Type: **not specified**

## CMSSW - II

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: 58

Type: **not specified**

## CMSSW - I

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: 59

Type: **not specified**

## ROOT - III (ROOT Tree, Useful Tool for Data Analysis)

*Thursday 25 August 2016 09:00 (50 minutes)*

**Presenter:** SADDIQUE, Asif (National Centre for Physics (PK))

Contribution ID: **60**

Type: **not specified**

## ROOT Practice Session

*Thursday 25 August 2016 09:50 (50 minutes)*

**Presenter:** SADDIQUE, Asif (National Centre for Physics (PK))

Contribution ID: **61**

Type: **not specified**

## CMSSW - I

*Thursday 25 August 2016 11:10 (50 minutes)*

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: **62**

Type: **not specified**

## CMSSW - III

*Thursday 25 August 2016 14:30 (50 minutes)*

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: **63**

Type: **not specified**

## CMSSW - II

*Thursday 25 August 2016 12:00 (50 minutes)*

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))



Contribution ID: **64**

Type: **not specified**

## CMSSW - IV

*Thursday 25 August 2016 15:20 (1h 40m)*

**Presenters:** AHMAD, Muhammad (National Centre for Physics (PK)); KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: 65

Type: **not specified**

## Lab - 2 (Linux)

*Monday 15 August 2016 16:10 (50 minutes)*

**Presenter:** SHARJEEL

Contribution ID: 66

Type: **not specified**

# Quantum Field Theory

*Wednesday 17 August 2016 12:00 (50 minutes)*

**Presenter:** AYUB FARIDI

Contribution ID: 67

Type: **not specified**

## Quantum Chromodynamics (QCD) - IV

*Friday 19 August 2016 14:00 (50 minutes)*

**Presenter:** FAISAL AKRAM

Contribution ID: **68**

Type: **not specified**

## **Introduction to C++ (I)**

*Monday 22 August 2016 16:10 (50 minutes)*

**Presenter:** KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: **69**

Type: **not specified**

## Introduction to C++ (II)

*Tuesday 23 August 2016 16:10 (50 minutes)*

**Presenter:** KHURSHID, Taimoor (National Centre for Physics (PK))

Contribution ID: 70

Type: **not specified**

## Micro Black Hole Searches using CMS Run II Data

*Tuesday 23 August 2016 09:00 (1h 40m)*

**Presenter:** SADDIQUE, Asif (National Centre for Physics (PK))