

# **IMPRS Young Scientist Workshop at Ringberg Castle**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

# **Measurement of the mass of the Higgs boson in the four lepton decay channel with the ATLAS detector at the LHC**

**Presenter:** RÖHRIG, Rainer

Contribution ID: 1

Type: **not specified**

## **Studies of Higgs hadronic decay channels at CLIC**

**Presenter:** Mr SZALAY, Marco (FutAcc)

Contribution ID: 2

Type: **not specified**

## **Top quark mass measurements in the light of full NLO calculations**

**Presenter:** MAIER, Andreas

Contribution ID: 3

Type: **not specified**

## **Introduction to models with a radiative neutrino mass**

*Friday, 10 July 2015 09:10 (20 minutes)*

**Presenter:** GEIB, Tanja

**Session Classification:** NEUTRINO PHYSICS

Contribution ID: 4

Type: **not specified**

## **Diffuse neutrino flux from extragalactic supernova remnants**

*Friday, 10 July 2015 09:50 (20 minutes)*

**Presenter:** IZAGUIRRE, Ignacio

**Session Classification:** NEUTRINO PHYSICS

Contribution ID: 5

Type: **not specified**

## **Development of Pixel Detectors for the Inner Tracker Upgrade of the ATLAS Experiment**

**Presenter:** SAVIC, Natascha

Contribution ID: 6

Type: **not specified**

## **New sMDT-chambers for the ATLAS Muon-Spectrometer**

**Presenter:** SCHMIDT-SOMMERFELD, Korbinian



Contribution ID: 7

Type: **not specified**

## **Simulation of the time structure of hadronic showers in calorimeters with gas and with scintillator readout**

*Wednesday, 8 July 2015 11:00 (30 minutes)*

**Presenter:** GOECKE, Philipp

**Session Classification:** LINEAR COLLIDER PHYSICS

Contribution ID: 8

Type: **not specified**

## **Principles of thermalization**

**Presenter:** VOGEL, Hendrik

Contribution ID: 9

Type: **not specified**

## **Impact of sterile neutrinos on long baseline experiments**

**Presenter:** KLOP, Niki

Contribution ID: **10**

Type: **not specified**

## **Symmetry Breaking in collective neutrino oscillations**

**Presenter:** DE SOUSA SEIXAS, David

Contribution ID: 11

Type: **not specified**

## **Magnetic field effects on neutrino oscillation in supernovas**

**Presenter:** IZAGUIRRE, Ignacio

Contribution ID: 12

Type: **not specified**

## **Condition Monitoring and Machine Diagnostics**

*Wednesday, 8 July 2015 17:00 (1 hour)*

**Presenter:** Dr GERMER (DEVELOPMENT INGENEER, PRÜFTECHNIK AG), Jan

**Session Classification:** Job Opportunities

Contribution ID: 13

Type: **not specified**

## **Working in the headquarters of the Fraunhofer-Gesellschaft**

**Presenter:** Dr SEIDEL, Katja (Fraunhofer-Gesellschaft)

Contribution ID: 14

Type: **not specified**

## Searching for R-Parity Violating Supersymmetry with ATLAS

**Presenter:** GOBLIRSCH, Max



Contribution ID: 15

Type: **not specified**

## **Reinterpretation of ATLAS Searches for Supersymmetry in the Context of R-Parity Violating Models**

**Presenter:** KRAUSS, Dominik

Contribution ID: 16

Type: **not specified**

## **The Belle/Belle II Experiment**

**Presenter:** Dr RITTER, Martin

Contribution ID: 17

Type: **not specified**

## The Belle II Vertex Pixel Detector

**Presenter:** MUELLER, Felix B.

Contribution ID: 18

Type: **not specified**

## **The Neutral Z-Vertex Trigger for Belle II**

**Presenter:** ABUDINEN, Fernando

Contribution ID: 19

Type: **not specified**

## **NLO Calculations for LHC with GoSam**

**Presenter:** VAN DEURZEN, Hans

Contribution ID: 20

Type: **not specified**

## **Applications of NLO automation with GoSam**

**Presenter:** VON SODEN-FRAUNHOFEN, Johann Felix

Contribution ID: 21

Type: **not specified**

## Differential Equations for Feynman Integrals

**Presenter:** SCHUBERT, Ulrich

Contribution ID: 22

Type: **not specified**

## The quest for dark matter

*Tuesday, 7 July 2015 09:00 (30 minutes)*

**Presenter:** FERREIRO, Nahuel

**Session Classification:** CRESST Physics



Contribution ID: 23

Type: **not specified**

## **Status of the CRESST dark matter search**

*Tuesday, 7 July 2015 09:20 (30 minutes)*

**Presenter:** TANZKE, Anja

**Session Classification:** CRESST Physics

Contribution ID: 24

Type: **not specified**

## Quasiparticle diffusion in CRESST light detectors

*Tuesday, 7 July 2015 09:40 (30 minutes)*

**Presenter:** WUESTRICH, Marc

**Session Classification:** CRESST Physics

Contribution ID: 25

Type: **not specified**

## **Alpha interactions in high purity germanium detectors**

**Presenter:** GARBINI, Lucia

Contribution ID: 26

Type: **not specified**

## **Search for Dark Matter with the ATLAS Detector**

*Tuesday, 7 July 2015 14:30 (30 minutes)*

**Presenter:** RÖHRIG, Rainer

**Session Classification:** ATLAS PHYSICS

Contribution ID: 27

Type: **not specified**

## **Measurement of Higgs boson CP-properties using four lepton decay recorded with the ATLAS detector**

**Presenter:** ECKER, Katharina

Contribution ID: 28

Type: **not specified**

## **Higgs to hadrons at 350 GeV at CLIC**

*Wednesday, 8 July 2015 11:30 (30 minutes)*

**Presenter:** SZALAY, Marco

**Session Classification:** LINEAR COLLIDER PHYSICS

Contribution ID: 29

Type: **not specified**

## **Aspects of Moduli Stabilisation and Inflation in String Theory**

**Presenter:** WOLF, Florian

Contribution ID: **30**

Type: **not specified**

## **Model Analysis for the MAGIC Telescopes**

**Presenter:** MENZEL, Uta



Contribution ID: 31

Type: **not specified**

## **Introduction to the ATLAS Detector and the New Small Wheel Upgrade**

**Presenter:** MÜLLER, Ralph

Contribution ID: 32

Type: **not specified**

## **An MDT based Trigger for ATLAS**

**Presenter:** NOWAK, Sebastian

Contribution ID: 33

Type: **not specified**

## **The upgrades of the ATLAS pixel detector**

**Presenter:** TERZO, Stefano

Contribution ID: 34

Type: **not specified**

## Symmetries in EFT

*Wednesday, 8 July 2015 09:00 (30 minutes)*

**Presenter:** HWANG, Sungmin

**Session Classification:** EFT, QFT & LOOPS

Contribution ID: 35

Type: **not specified**

## One-loop computations with FeynCalc

*Wednesday, 8 July 2015 10:00 (30 minutes)*

**Presenter:** SHTABOVENKO, Vladyslav

**Session Classification:** EFT, QFT & LOOPS

Contribution ID: 36

Type: **not specified**

## **Physics of Renewable Energies**

**Presenter:** Prof. BIEBEL, Otmar (LMU)

Contribution ID: 37

Type: **not specified**

## Welcome & Introduction Round

*Monday, 6 July 2015 11:30 (20 minutes)*

Contribution ID: 39

Type: **not specified**

## Diffusion Constants

**Presenter:** GUETER, Dario



Contribution ID: 44

Type: **not specified**

## **Diffusion Constants in Electroweak Phase Transition: Leading Order Results**

*Wednesday, 8 July 2015 14:00 (30 minutes)*

**Presenter:** GUETER, Dario

**Session Classification:** EARLY UNIVERSE & STRING THEORY

Contribution ID: 46

Type: **not specified**

**(no title)**

Contribution ID: 50

Type: **not specified**

# The magic panorama of high energy astronomy

*Monday, 6 July 2015 14:30 (40 minutes)*

**Presenter:** STRZYS, Marcel

**Session Classification:** MAGIC PHYSICS

Contribution ID: 51

Type: **not specified**

## **Data Analysis: Extracting Science from MAGIC**

*Monday, 6 July 2015 14:00 (30 minutes)*

**Presenter:** MENZEL, Uta

**Session Classification:** MAGIC PHYSICS

Contribution ID: 52

Type: **not specified**

## **The MAGIC hunt for single photons**

*Monday, 6 July 2015 15:10 (20 minutes)*

**Presenter:** MÜLLER, Dominik

**Session Classification:** MAGIC PHYSICS

Contribution ID: 53

Type: **not specified**

# Transparency of the Universe to very high energy photons

*Tuesday, 7 July 2015 15:00 (30 minutes)*

**Presenter:** Dr KARTAVTSEV, Alexander

**Session Classification:** ASTROPARTICLE PHYSICS

Contribution ID: 55

Type: **not specified**

# Top Quark Physics - Part I

*Monday, 6 July 2015 16:00 (1 hour)*

**Presenter:** Prof. HOANG (UNIVERSITY OF VIENNA), Andre

**Session Classification:** LECTURE

Contribution ID: 56

Type: **not specified**

## Top Quark Physics - Part II

*Tuesday, 7 July 2015 11:00 (1h 30m)*

**Presenter:** Prof. HOANG, Andre

**Session Classification:** LECTURE



Contribution ID: 57

Type: **not specified**

# **Electroweak corrections to Higgs Production at LHC in THDM**

*Tuesday, 7 July 2015 16:30 (30 minutes)*

**Presenter:** CHENG, Tao-Li

**Session Classification:** TWO HIGGS DOUBLET MODELS

Contribution ID: 58

Type: **not specified**

## **Electroweak precision calculations in Two Higgs doublet models**

*Tuesday, 7 July 2015 16:00 (30 minutes)*

**Presenter:** HESSENBERGER, Stephan

**Session Classification:** TWO HIGGS DOUBLET MODELS

Contribution ID: 59

Type: **not specified**

## **Impact of the Luminosity Spectrum on top Mass Measurements at Linear Colliders**

*Wednesday, 8 July 2015 12:00 (30 minutes)*

**Presenter:** GABRIEL, Miroslav

**Session Classification:** LINEAR COLLIDER PHYSICS

Contribution ID: **60**

Type: **not specified**

## **ATLAS muon performance in first LHC run 2 data**

*Tuesday, 7 July 2015 14:00 (30 minutes)*

**Presenter:** KÖHLER, Nicolas (Max-Planck-Institut für Physik (DE))

**Session Classification:** ATLAS PHYSICS

Contribution ID: **61**

Type: **not specified**

## **Loops and Graphs**

*Wednesday, 8 July 2015 09:30 (30 minutes)*

**Presenter:** PAPARA, Viktor

**Session Classification:** EFT, QFT & LOOPS

Contribution ID: 62

Type: **not specified**

## Pairing correlations

*Friday, 10 July 2015 10:10 (20 minutes)*

**Presenter:** VOGEL, Hendrik

**Session Classification:** NEUTRINO PHYSICS

Contribution ID: 66

Type: **not specified**

## **Results of the Electrical Multi-Chip Module for the Belle II Pixel Detector**

*Monday, 6 July 2015 11:50 (20 minutes)*

**Presenter:** MUELLER, Felix B.

**Session Classification:** BELLE PHYSICS I

Contribution ID: 67

Type: **not specified**

## **B-Meson Flavour Tagging for the Belle II Experiment**

*Friday, 10 July 2015 12:00 (20 minutes)*

**Presenter:** ABUDINEN, Fernando

**Session Classification:** BELLE PHYSICS II



Contribution ID: 68

Type: **not specified**

## **Test of Readout Electronics for Belle II Pixel Detector**

*Monday, 6 July 2015 12:10 (20 minutes)*

**Presenter:** HAIDL, Jacob

**Session Classification:** BELLE PHYSICS I

Contribution ID: 72

Type: **not specified**

## The z-Vertex Trigger for Belle II

*Friday, 10 July 2015 11:20 (20 minutes)*

**Presenter:** SKAMBRAKS, Sebastian

**Session Classification:** BELLE PHYSICS II

Contribution ID: 73

Type: **not specified**

## **A Neural Network z-Vertex Trigger for Belle II**

*Friday, 10 July 2015 11:00 (20 minutes)*

**Presenter:** NEUHAUS, Sara

**Session Classification:** BELLE PHYSICS II

Contribution ID: 74

Type: **not specified**

## **Optimisation of the B meson vertex resolution for the Belle II experiment**

*Friday, 10 July 2015 11:40 (20 minutes)*

**Presenter:** ROCA CATALA, Christian

**Session Classification:** BELLE PHYSICS II

Contribution ID: 75

Type: **not specified**

## **Introduction to AdS/CFT**

*Thursday, 9 July 2015 09:00 (30 minutes)*

**Presenter:** ARAUJO, Mario

**Session Classification:** ADS/CFT

Contribution ID: 76

Type: **not specified**

# Holographic entanglement entropy

*Thursday, 9 July 2015 09:30 (30 minutes)*

**Presenter:** STRAUB, Ann-Kathrin

**Session Classification:** ADS/CFT

Contribution ID: 77

Type: **not specified**

## **Electron acceleration in plasma wakefield accelerators**

*Wednesday, 8 July 2015 16:00 (30 minutes)*

**Presenter:** ISRAELI, Yasmine

**Session Classification:** FUTURE ACCELERATORS

Contribution ID: 78

Type: **not specified**

## **Laser propagation in AWAKE**

*Wednesday, 8 July 2015 16:30 (30 minutes)*

**Presenter:** JOULAEI, Atefeh

**Session Classification:** FUTURE ACCELERATORS



Contribution ID: 79

Type: **not specified**

# Aspects of Moduli Stabilisation and Inflation in String Theory

*Wednesday, 8 July 2015 14:30 (30 minutes)*

**Presenter:** WOLF, Florian

**Session Classification:** EARLY UNIVERSE & STRING THEORY

Contribution ID: **80**

Type: **not specified**

## **Radiative Neutrino Masses**

*Friday, 10 July 2015 09:30 (20 minutes)*

**Presenter:** PLATSCHER, Moritz

**Session Classification:** NEUTRINO PHYSICS

Contribution ID: 83

Type: **not specified**

## **What string theory tells us about the black hole**

*Wednesday, 8 July 2015 15:00 (30 minutes)*

**Presenter:** KIDAMBI, Abhiram

**Session Classification:** EARLY UNIVERSE & STRING THEORY

Contribution ID: **84**

Type: **not specified**

## **Rhode & Schwarz - Innovations in Oscilloscopes**

*Tuesday, 7 July 2015 17:00 (1 hour)*

**Presenter:** Dr WEIGELL, Philipp (Produktmanager Oszilloscope, Rhode & Schwarz)

**Session Classification:** Job Opportunities

Contribution ID: 85

Type: **not specified**

## **Scripting and distributed computation with Mathematica**

*Monday, 6 July 2015 17:00 (30 minutes)*

**Presenter:** Dr HAHN, Thomas

**Session Classification:** COMPUTATIONAL PHYSICS