

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

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

# **Finding tau leptons originating from highly energetic particle decays**

*Thursday, 20 July 2017 11:35 (25 minutes)*

**Presenter:** RENDEL, Marian

**Session Classification:** ATLAS OBJECT RECONSTRUCTION

Contribution ID: 1

Type: **not specified**

## **Search for top squarks with the ATLAS detector**

*Thursday, 20 July 2017 15:15 (25 minutes)*

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

**Session Classification:** ATLAS PHYSICS III

Contribution ID: 2

Type: **not specified**

## **Search for top squarks with the ATLAS detector - aided by machine learning**

*Thursday, 20 July 2017 15:40 (20 minutes)*

**Presenter:** GRAW, Jonas

**Session Classification:** ATLAS PHYSICS III

Contribution ID: 3

Type: **not specified**

# Neural Networks in the Belle II Track Trigger

**Presenter:** NEUHAUS, Sara

Contribution ID: 4

Type: **not specified**

# **The Neuro-Z-Vertex Trigger of the Belle II Experiment**

**Presenter:** SKAMBRAKS, Sebastian

Contribution ID: 5

Type: **not specified**

## **Module Tests of the Belle II Pixel Vertex Detector**

**Presenter:** LEITL, Philipp

Contribution ID: 6

Type: **not specified**

## **Scintillator tiles with SiPM readout for calorimetry and fast timing in SuperKEKB comissioning**

**Presenter:** WINDEL, Hendrik



Contribution ID: 7

Type: **not specified**

## **The Belle II / SuperKEKB Commissioning Detector - Results from the First Commissioning Phase**

*Wednesday, 19 July 2017 09:00 (25 minutes)*

**Presenter:** GABRIEL, Miroslav

**Session Classification:** BELLE PHYSICS I

Contribution ID: 8

Type: **not specified**

## **CLAWS Phase 2: Beam background monitoring in the commissioning of SuperKEKB**

*Wednesday, 19 July 2017 09:25 (25 minutes)*

**Presenter:** HEUCHEL, Daniel

**Session Classification:** BELLE PHYSICS I

Contribution ID: 9

Type: **not specified**

## **How to make the PPSMC Colloquium more attractive?**

Contribution ID: **10**

Type: **not specified**

## **Improving the PPSM Colloquium Peer Evaluation Form**

Contribution ID: **11**

Type: **not specified**

## Preparing for the SAB Meeting

Contribution ID: 12

Type: **not specified**

## **Neutron background measurement for rare-event underground experiments**

*Tuesday, 18 July 2017 09:25 (25 minutes)*

**Presenter:** DU, Quiang

**Session Classification:** RARE EVENT PHYSICS

Contribution ID: **13**

Type: **not specified**

## **Closed Discussion on the Advisory Panel System**

Contribution ID: 14

Type: **not specified**

## **Layered dielectric haloscopes: a new way to search for axion dark matter**

**Presenter:** MILLAR, Alexander



Contribution ID: 15

Type: **not specified**

## **Astrophysics at the TeV scale**

**Presenter:** STRZYS, Marcel

Contribution ID: **16**

Type: **not specified**

# AWAKE

**Presenter:** HÜTHER, Mathias

Contribution ID: 17

Type: **not specified**

## **Pulsars at very high energy with MAGIC and the SumTrigger-II**

*Monday, 17 July 2017 16:35 (25 minutes)*

**Presenter:** CERIBELLA, Giovanni

**Session Classification:** MAGIC PHYSICS

Contribution ID: **18**

Type: **not specified**

## **Plasma-based diagnostic for the SMI in AWAKE**

*Friday, 21 July 2017 11:00 (25 minutes)*

**Presenter:** BACHMANN, Anna-Maria

**Session Classification:** AWAKE PHYSICS

Contribution ID: **19**

Type: **not specified**

## **Characterization of a segmented BEGe Detector**

*Friday, 21 July 2017 09:15 (25 minutes)*

**Presenter:** SCHUSTER, Martin

**Session Classification:** GERMANIUM DETECTOR PHYSICS

Contribution ID: 20

Type: **not specified**

# **Influence of the Metallization on the Charge Collection Efficiency of Segmented Germanium Detector**

*Friday, 21 July 2017 09:40 (25 minutes)*

**Presenter:** HAUTERMANN, Lukas

**Session Classification:** GERMANIUM DETECTOR PHYSICS

Contribution ID: 21

Type: **not specified**

## **Development of novel pulse shape discrimination algorithms for Gerda**

*Friday, 21 July 2017 10:05 (25 minutes)*

**Presenter:** HOLL, Philipp

**Session Classification:** GERMANIUM DETECTOR PHYSICS

Contribution ID: 22

Type: **not specified**

## **Small Neutrino Masses from Gravitational Theta-Term**

**Presenter:** FUNCCKE, Lena



Contribution ID: 23

Type: **not specified**

## Introduction to Double Field Theory

*Tuesday, 18 July 2017 09:00 (25 minutes)*

**Presenter:** DU BOSQUE, Pascal

**Session Classification:** STRING THEORY

Contribution ID: 24

Type: **not specified**

# Integrable toy models in string and gauge theory

**Presenter:** OSTEN, David

Contribution ID: 25

Type: **not specified**

## String Phenomenology and Cosmology

**Presenter:** WOLF, Florian

Contribution ID: 26

Type: **not specified**

# Heavy quark potentials in effective string theory

*Monday, 17 July 2017 15:45 (25 minutes)*

**Presenter:** HWANG, Sungmin

**Session Classification:** THEORY

Contribution ID: 27

Type: **not specified**

## Intro to AdS/CFT

*Monday, 17 July 2017 16:10 (25 minutes)*

**Presenter:** MIEKLEY, Nina

**Session Classification:** THEORY

Contribution ID: **28**

Type: **not specified**

# Linux Unchained

**Presenter:** PAPARA, Viktor

Contribution ID: 29

Type: **not specified**

# Quantum Gravity Constraints on Large Field Inflation

*Thursday, 20 July 2017 11:10 (25 minutes)*

**Presenter:** KLÄWER, Daniel

**Session Classification:** STRING COSMOLOGY

Contribution ID: 30

Type: **not specified**

## Stringy Axion Inflation

*Thursday, 20 July 2017 10:45 (25 minutes)*

**Presenter:** WOLF, Florian

**Session Classification:** STRING COSMOLOGY



Contribution ID: 31

Type: **not specified**

## **HZZ Tensor structure measurements in the $pp \rightarrow H \rightarrow ZZ \rightarrow 4l$ channel with the ATLAS Detector**

*Monday, 17 July 2017 14:00 (25 minutes)*

**Presenter:** WALBRECHT, Verena

**Session Classification:** ATLAS PHYSICS I

Contribution ID: 32

Type: **not specified**

## **Searches for diboson resonances with the ATLAS detector**

*Monday, 17 July 2017 14:25 (25 minutes)*

**Presenter:** HÖNLE, Andreas

**Session Classification:** ATLAS PHYSICS I

Contribution ID: 33

Type: **not specified**

## **Search for displaced dileptons with the ATLAS experiment at the LHC**

*Monday, 17 July 2017 14:50 (25 minutes)*

**Presenter:** KRAUSS, Dominik

**Session Classification:** ATLAS PHYSICS I

Contribution ID: 35

Type: **not specified**

## About Holography

**Presenter:** NEWRZELLA, Max

Contribution ID: 37

Type: **not specified**

# Phonon Focusing in Cryogenic Detectors

**Presenter:** ROTHE, Johannes

Contribution ID: **38**

Type: **not specified**

## **Time dependent CP-violation studies at Belle II**

*Thursday, 20 July 2017 09:00 (25 minutes)*

**Presenter:** ABUDINEN, Fernando

**Session Classification:** BELLE PHYSICS II

Contribution ID: 39

Type: **not specified**

## **Track vertex reconstruction with neural networks at the first level trigger of Belle II**

*Thursday, 20 July 2017 09:25 (25 minutes)*

**Presenter:** POHL, Sara

**Session Classification:** BELLE PHYSICS II

Contribution ID: 40

Type: **not specified**

## **Cosmic-ray neutron and muon-induced background**

**Presenter:** VANHOEFER, Laura



Contribution ID: 41

Type: **not specified**

## **keV dark matter and structure formation**

*Tuesday, 18 July 2017 11:10 (30 minutes)*

**Presenter:** TOTZAUER, Max

**Session Classification:** DARK MATTER PHYSICS II

Contribution ID: 42

Type: **not specified**

## Welcome & Introduction Round

*Monday, 17 July 2017 11:30 (30 minutes)*

Contribution ID: 43

Type: **not specified**

# Data Analysis for CRESST

*Monday, 17 July 2017 12:00 (30 minutes)*

**Presenter:** BAUER, Philipp

**Session Classification:** DARK MATTER PHYSICS I

Contribution ID: 44

Type: **not specified**

# Theoretical Foundations of Dielectric Haloscopes

*Tuesday, 18 July 2017 11:40 (25 minutes)*

**Presenter:** MILLAR, Alexander

**Session Classification:** DARK MATTER PHYSICS II

Contribution ID: 45

Type: **not specified**

# Searching for Dark Matter Axions with a Dielectric Haloscope

*Tuesday, 18 July 2017 12:05 (25 minutes)*

**Presenter:** KNIRCK, Stefan

**Session Classification:** DARK MATTER PHYSICS II

Contribution ID: 46

Type: **not specified**

## Search for dark matter in the mono-Higgs channel

*Tuesday, 18 July 2017 14:25 (25 minutes)*

**Presenter:** RÖHRIG, Rainer

**Session Classification:** ATLAS PHYSICS II

Contribution ID: 47

Type: **not specified**

## **Search for dark matter in association with hadronic vector boson decays**

*Tuesday, 18 July 2017 14:00 (25 minutes)*

**Presenter:** GADOW, Philipp

**Session Classification:** ATLAS PHYSICS II

Contribution ID: 48

Type: **not specified**

## **Development and test of new sMDT chambers and electronics for ATLAS**

**Presenter:** SCHMIDT-SOMMERFELD, Korbinian



Contribution ID: 50

Type: **not specified**

## Collective Effects of Neutrinos

**Presenter:** STIRNER, Tobias

Contribution ID: 51

Type: **not specified**

## **The Belle II Pixel Vertex Detector - Mainproduction Module Tests**

*Tuesday, 18 July 2017 15:50 (25 minutes)*

**Presenter:** LEITL, Philipp

**Session Classification:** DETECTOR PHYSICS II

Contribution ID: 52

Type: **not specified**

## Future High Energy $e^+e^-$ - Experiments

*Tuesday, 18 July 2017 10:15 (25 minutes)*

**Presenter:** GRAF, Christian

**Session Classification:** DETECTOR PHYSICS I

Contribution ID: 53

Type: **not specified**

# **Background suppression with neural networks at the Belle II Trigger**

*Thursday, 20 July 2017 09:50 (25 minutes)*

**Presenter:** SKAMBRAKS, Sebastian

**Session Classification:** BELLE PHYSICS II

Contribution ID: 54

Type: **not specified**

# Understanding the performance of the ATLAS detector

*Thursday, 20 July 2017 12:00 (30 minutes)*

**Presenter:** JUNGGEBURTH, Johannes

**Session Classification:** ATLAS OBJECT RECONSTRUCTION

Contribution ID: 55

Type: **not specified**

## **Characterization of the detector dead layer for a sterile neutrino search with KATRIN**

*Tuesday, 18 July 2017 09:50 (25 minutes)*

**Presenter:** BRUNST, Tim

**Session Classification:** RARE EVENT PHYSICS

Contribution ID: 56

Type: **not specified**

## **Scintillator tiles with SiPM readout for fast timing in SuperKEKB commissioning**

*Wednesday, 19 July 2017 09:50 (25 minutes)*

**Presenter:** WINDEL, Hendrik

**Session Classification:** BELLE PHYSICS I

Contribution ID: 57

Type: **not specified**

# **Interferometer-based white light measurement of neutral rubidium density for the AWAKE experiment at CERN**

*Friday, 21 July 2017 11:25 (25 minutes)*

**Presenter:** BATSCH, Fabian

**Session Classification:** AWAKE PHYSICS



Contribution ID: 58

Type: **not specified**

## **A SMI seeding concept for AWAKE Run 2**

*Friday, 21 July 2017 11:50 (25 minutes)*

**Presenter:** HÜTHER, Mathias

**Session Classification:** AWAKE PHYSICS

Contribution ID: 59

Type: **not specified**

# From Cosmology to Investment Banking IT

*Thursday, 20 July 2017 17:00 (30 minutes)*

**Presenter:** Dr KOSTKA, Philipp (European Bank for Financial Services GmbH (ebase®))

**Session Classification:** JOB OPPORTUNITIES III

Contribution ID: **60**

Type: **not specified**

## **Job advice: Unconventional Career Paths**

*Tuesday, 18 July 2017 16:15 (30 minutes)*

**Presenter:** Prof. AKERBLOM, Nikolas (Hochschule Heilbronn / Heilbronn University)

**Session Classification:** JOB OPPORTUNITIES I

Contribution ID: 61

Type: **not specified**

## **Improvement of energy reconstruction by using machine learning algorithms in MAGIC**

*Monday, 17 July 2017 17:00 (25 minutes)*

**Presenter:** ISHIO, Kazuma

**Session Classification:** MAGIC PHYSICS

Contribution ID: 62

Type: **not specified**

## **Ensuring good scientific practice, what does this mean?**

*Tuesday, 18 July 2017 14:50 (30 minutes)*

**Presenter:** Dr MAJOROVITS, Bela

**Session Classification:** SPECIAL SEMINAR

Contribution ID: 63

Type: **not specified**

## **Becoming a Patent Attorney**

*Thursday, 20 July 2017 16:30 (30 minutes)*

**Presenter:** Dr HELD, Johannes

**Session Classification:** JOB OPPORTUNITIES III

Contribution ID: 64

Type: **not specified**

## **MedAustron - Cancer Treatment with Particle Therapy**

*Wednesday, 19 July 2017 19:45 (45 minutes)*

**Presenter:** Dr NOWAK, Sebastian (MedAustron)

**Session Classification:** JOB OPPORTUNITIES II

Contribution ID: 65

Type: **not specified**

# **A Global Bayesian Analysis of Neutrino Mass Data**

*Wednesday, 19 July 2017 10:15 (50 minutes)*

**Presenter:** Dr MERLE, Alexander

**Session Classification:** KEYNOTE LECTURE