

IMPRS Young Scientist Workshop at Ringberg Castle

Report of Contributions

Contribution ID: 0

Type: **not specified**

Dark Matter via N Dark Sectors

Presenter: KOUTSANGELAS, Emmanouil

Contribution ID: 1

Type: **not specified**

Data Analysis in CRESST

Wednesday, 24 July 2019 10:05 (25 minutes)

Presenter: FUCHS, Dominik

Session Classification: EXPERIMENTAL ASTROPARTICLE & NEUTRINO PHYSICS

Contribution ID: 2

Type: **not specified**

Stringy Axion Inflation

Presenter: WOLF, Florian

Contribution ID: 3

Type: **not specified**

Quantum Gravity Constraints on Large Field Inflation

Presenter: KLÄWER, Daniel

Contribution ID: 4

Type: **not specified**

Seeded Self-Modulation of a Relativistic Proton Drive Bunch in Plasma

Monday, 22 July 2019 14:15 (25 minutes)

Presenter: BACHMANN, Anna-Maria

Session Classification: AWAKE PHYSICS

Contribution ID: 5

Type: **not specified**

Micro-Bunching Phase Stability & Self-Modulation Studies in AWAKE

Monday, 22 July 2019 14:40 (25 minutes)

Presenter: BATSCH, Fabian

Session Classification: AWAKE PHYSICS

Contribution ID: 6

Type: **not specified**

The Hosing Instability in AWAKE

Monday, 22 July 2019 15:05 (25 minutes)

Presenter: HÜTHER, Mathias

Session Classification: AWAKE PHYSICS

Contribution ID: 7

Type: **not specified**

D-brane basics

Tuesday, 23 July 2019 09:25 (25 minutes)

Presenter: BRINKMANN, Max

Session Classification: STRING THEORY

Contribution ID: 8

Type: **not specified**

A Sneak into Core Collapse Supernova

Monday, 22 July 2019 16:00 (25 minutes)

Presenter: EHRING, Jakob

Session Classification: ASTROPHYSICS

Contribution ID: 9

Type: **not specified**

A Global Bayesian Analysis of Neutrino Mass Data

Presenter: Dr MERLE, Alexander

Contribution ID: **10**

Type: **not specified**

Future High Energy e+e- - Experiments

Presenter: GRAF, Christian

Contribution ID: 11

Type: **not specified**

Search for top squarks with the ATLAS detector

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

Contribution ID: 12

Type: **not specified**

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

Presenter: GRAW, Jonas

Contribution ID: 13

Type: **not specified**

Search for dark matter in association with hadronic vector boson decays

Presenter: GADOW, Philipp

Contribution ID: 14

Type: **not specified**

Search for dark matter in the mono-Higgs channel

Presenter: RÖHRIG, Rainer

Contribution ID: 15

Type: **not specified**

The Belle II Neurotrigger Project

Tuesday, 23 July 2019 16:40 (20 minutes)

Presenter: MEGGENDORFER, Felix

Session Classification: BELLE PHYSICS

Contribution ID: 17

Type: **not specified**

Kickstarting a Particle Accelerator

Tuesday, 23 July 2019 16:00 (20 minutes)

Presenter: WINDEL, Hendrik

Session Classification: BELLE PHYSICS

Contribution ID: 18

Type: **not specified**

The Belle 2 Pixel Detector

Tuesday, 23 July 2019 16:20 (20 minutes)

Presenter: REIF, Markus

Session Classification: BELLE PHYSICS

Contribution ID: 19

Type: **not specified**

Tau Physics Program in Belle II

Presenter: KRÄTZSCHMAR, Thomas

Contribution ID: 20

Type: **not specified**

Ensuring good scientific practice, what does this mean?

Presenter: Dr MAJOROVITS, Bela

Contribution ID: 21

Type: **not specified**

MedAustron - Cancer Treatment with Particle Therapy

Presenter: Dr NOWAK, Sebastian (MedAustron)

Contribution ID: 22

Type: **not specified**

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

Presenter: CERIBELLA, Giovanni

Contribution ID: 23

Type: **not specified**

Improvement of energy reconstruction by using machine learning algorithms in MAGIC

Presenter: ISHIO, Kazuma

Contribution ID: 24

Type: **not specified**

Plasma-based diagnostic for the SMI in AWAKE

Presenter: BACHMANN, Anna-Maria

Contribution ID: 25

Type: **not specified**

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

Presenter: BATSCH, Fabian

Contribution ID: 26

Type: **not specified**

A SMI seeding concept for AWAKE Run 2

Presenter: HÜTHER, Mathias

Contribution ID: 27

Type: **not specified**

Germanium Detectors - Working Principle and Pulse Shape Analysis

Friday, 26 July 2019 11:35 (25 minutes)

Presenter: SCHUSTER, Martin

Session Classification: LOW BACKGROUND EXPERIMENTS

Contribution ID: 28

Type: **not specified**

Development of Signal Readout Electronics for the LEGEND Experiment

Friday, 26 July 2019 12:00 (25 minutes)

Presenter: EDZARDS, Frank

Session Classification: LOW BACKGROUND EXPERIMENTS

Contribution ID: 29

Type: **not specified**

Active background reduction methods in low background experiments

Friday, 26 July 2019 11:10 (25 minutes)

Presenter: HAYWARD, Connor

Session Classification: LOW BACKGROUND EXPERIMENTS

Contribution ID: **30**

Type: **not specified**

CP violation in Higgs-gauge interacions

Presenter: HALA, Amando

Contribution ID: 31

Type: **not specified**

My favourite topic

Presenter: MAESTRI, Leila

Contribution ID: 32

Type: **not specified**

My favourite topic

Presenter: DLAPA, Christoph

Contribution ID: 33

Type: **not specified**

Finding tau leptons originating from highly energetic particle decays

Presenter: RENDEL, Marian

Contribution ID: 34

Type: **not specified**

Understanding the performance of the ATLAS detector

Presenter: JUNGGEBURTH, Johannes

Contribution ID: 35

Type: **not specified**

Job advice: Unconventional Career Paths

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

Contribution ID: 36

Type: **not specified**

Becoming a Patent Attorney

Presenter: Dr HELD, Johannes

Contribution ID: 37

Type: **not specified**

From Cosmology to Investment Banking IT

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

Contribution ID: **38**

Type: **not specified**

Time dependent CP-violation studies at Belle II

Presenter: ABUDINEN, Fernando

Contribution ID: 39

Type: **not specified**

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

Presenter: POHL, Sara

Contribution ID: 40

Type: **not specified**

Background suppression with neural networks at the Belle II Trigger

Presenter: SKAMBRAKS, Sebastian

Contribution ID: 41

Type: **not specified**

The Belle II Pixel Vertex Detector - Mainproduction Module Tests

Presenter: LEITL, Philipp

Contribution ID: 42

Type: **not specified**

Welcome & Introduction Round

Monday, 22 July 2019 11:30 (30 minutes)

Contribution ID: 43

Type: **not specified**

Introduction to AWAKE

Monday, 22 July 2019 14:00 (15 minutes)

Presenter: VERRA, Livio

Session Classification: AWAKE PHYSICS

Contribution ID: 44

Type: **not specified**

Introduction to MADMAX

Thursday, 25 July 2019 09:00 (25 minutes)

Presenter: SHTEMBARI, Lolian

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: 45

Type: **not specified**

An Introduction to String Theory

Tuesday, 23 July 2019 09:00 (25 minutes)

Presenter: OSTEN, David

Session Classification: STRING THEORY

Contribution ID: 46

Type: **not specified**

Don't Panic! BRST Quantization, Ghosts and Tachyon Condensation in Closed Superstring Field Theory

Tuesday, 23 July 2019 10:15 (25 minutes)

Presenter: SCHLECHTER, Lorenz

Session Classification: STRING THEORY

Contribution ID: 47

Type: **not specified**

Getting the best out of a particle detector (PXD)

Presenter: LEITL, Philipp

Contribution ID: 48

Type: **not specified**

Unraveling the mysteries of blazars with the MAGIC telescopes

Monday, 22 July 2019 16:25 (25 minutes)

Presenter: HECKMANN, Lea Alina

Session Classification: ASTROPHYSICS

Contribution ID: 49

Type: **not specified**

Optical calibration & instrumentation for the ICECUBE Upgrade

Wednesday, 24 July 2019 09:15 (25 minutes)

Presenter: HENNINGSEN, Felix

Session Classification: EXPERIMENTAL ASTROPARTICLE & NEUTRINO PHYSICS

Contribution ID: 50

Type: **not specified**

First Neutrino Mass Measurement Campaign with KATRIN

Tuesday, 23 July 2019 11:10 (25 minutes)

Presenter: SCHLÜTER, Lisa

Session Classification: NEUTRINO PHYSICS

Contribution ID: 51

Type: **not specified**

Investigations on the Detector Response to Electrons of the TRISTAN Prototype Detectors

Wednesday, 24 July 2019 09:40 (25 minutes)

Presenter: SIEGMANN, Daniel

Session Classification: EXPERIMENTAL ASTROPARTICLE & NEUTRINO PHYSICS

Contribution ID: 52

Type: **not specified**

Measurement of Direct CP Violation in $B \rightarrow K^+ \pi^-$ with Belle II

Tuesday, 23 July 2019 17:20 (20 minutes)

Presenter: WACH, Benedikt

Session Classification: BELLE PHYSICS

Contribution ID: 53

Type: **not specified**

The key role of Muons in ATLAS

Presenter: JUNGGEBURTH, Johannes

Contribution ID: 54

Type: **not specified**

Measurement of the HZZ Tensor Coupling in the $pp \rightarrow H \rightarrow ZZ \rightarrow 4l$ Decay Channel with the ATLAS Detector

Wednesday, 24 July 2019 16:50 (25 minutes)

Presenter: WALBRECHT, Verena

Session Classification: ATLAS PHYSICS

Contribution ID: 55

Type: **not specified**

Update from diboson resonance searches at ATLAS

Wednesday, 24 July 2019 16:25 (25 minutes)

Presenter: HÖNLE, Andi

Session Classification: ATLAS PHYSICS

Contribution ID: 56

Type: **not specified**

Search for supersymmetry in multileptonic final states with ATLAS

Wednesday, 24 July 2019 17:15 (25 minutes)

Presenter: RENDEL, Marian

Session Classification: ATLAS PHYSICS

Contribution ID: 57

Type: **not specified**

Low-Background Experiments: GERDA in a nutshell

Friday, 26 July 2019 10:45 (25 minutes)

Presenter: FISCHER, Felix

Session Classification: LOW BACKGROUND EXPERIMENTS

Contribution ID: 58

Type: **not specified**

Introducing the Axion and its Properties

Tuesday, 23 July 2019 14:00 (1 hour)

Presenter: REDONDO, Javier

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: 59

Type: **not specified**

Axion Cosmology I

Wednesday, 24 July 2019 11:00 (45 minutes)

Presenter: KENICHI, Saikawa

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: **60**

Type: **not specified**

Axion Cosmology II

Wednesday, 24 July 2019 11:45 (45 minutes)

Presenter: REDONDO, Javier

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: **61**

Type: **not specified**

Axion Searches

Thursday, 25 July 2019 09:25 (50 minutes)

Presenter: REDONDO, Javier

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: 62

Type: **not specified**

Introduction to Belle II

Presenter: PARLAHASHVILI, Ketevan

Contribution ID: 63

Type: **not specified**

D-branes and K-theory

Tuesday, 23 July 2019 09:50 (25 minutes)

Presenter: TRAUBE, Matthias

Session Classification: STRING THEORY

Contribution ID: 64

Type: **not specified**

Data Science at Airbus Defence and Space

Wednesday, 24 July 2019 14:00 (1 hour)

Presenter: MERLE, Alexander

Session Classification: JOB OPPORTUNITIES I

Contribution ID: 65

Type: **not specified**

Future Collider Experiments

Friday, 26 July 2019 09:00 (25 minutes)

Presenter: GRAF, Christian

Session Classification: FUTURE COLLIDERS AND DETECTORS

Contribution ID: 66

Type: **not specified**

Application of Timing in Future High Energy Particle Physics Detectors

Friday, 26 July 2019 09:50 (20 minutes)

Presenter: EMBERGER, Lorenz

Session Classification: FUTURE COLLIDERS AND DETECTORS

Contribution ID: 67

Type: **not specified**

Energy Reconstruction in a Highly Granular Scintillator-Based Calorimeter

Friday, 26 July 2019 09:25 (25 minutes)

Presenter: WINTER, Christian

Session Classification: FUTURE COLLIDERS AND DETECTORS

Contribution ID: **68**

Type: **not specified**

Womxn in Physics

Wednesday, 24 July 2019 15:00 (30 minutes)

Presenter: MCCARNEY, Sara

Session Classification: SPECIAL SEMINAR

Contribution ID: 69

Type: **not specified**

Track propagation for different detector and magnetic field setups in ACTS

Wednesday, 24 July 2019 16:00 (25 minutes)

Presenter: KLIMPEL, Fabian

Session Classification: ATLAS PHYSICS

Contribution ID: 70

Type: **not specified**

A Different Perspective on Strong CP & Axions

Tuesday, 23 July 2019 15:00 (30 minutes)

Presenter: KOUTSANGELAS, Emmanouil

Session Classification: BLOCK COURSE: AXION PHYSICS

Contribution ID: 71

Type: **not specified**

Chiral-Scalar Perturbation Theory

Monday, 22 July 2019 12:00 (25 minutes)

Presenter: MÜLLER, Christoph

Session Classification: THEORY & PHENOMENOLOGY

Contribution ID: 72

Type: **not specified**

X-ray observations of neutron stars and what to learn from it?

Monday, 22 July 2019 16:50 (50 minutes)

Presenter: BECKER, Werner

Session Classification: ASTROPHYSICS

Contribution ID: 73

Type: **not specified**

Neutrino physics from cosmology

Tuesday, 23 July 2019 11:35 (55 minutes)

Presenter: HANNESTAD, Steen

Session Classification: NEUTRINO PHYSICS

Contribution ID: 74

Type: **not specified**

McKinsey Consulting

Thursday, 25 July 2019 20:00 (1 hour)

Presenter: GEIB, Tanja

Session Classification: JOB OPPORTUNITIES III

Contribution ID: 75

Type: **not specified**

Optimization of the z-Vertex Neural Network Trigger in the Drift Chamber of the Belle II Experiment

Tuesday, 23 July 2019 17:00 (20 minutes)

Presenter: MCCARNEY, Sara

Session Classification: BELLE PHYSICS