

Retreat

CPPS

Report of Contributions

Retreat

/ Report of Contributions

Arrival

Contribution ID: 1

Type: **not specified**

Arrival

Wednesday, 14 February 2024 17:30 (1h 30m)

Contribution ID: 3

Type: **not specified**

Evening presentation: Particle Accelerators of the Future

Wednesday, 14 February 2024 20:00 (45 minutes)

Presenter: KILIAN, Wolfgang

Contribution ID: 4

Type: **not specified**

Introduction: Aim of this strategy meeting

Thursday, 15 February 2024 09:00 (30 minutes)

Presenters: GUIDO, Bell; DIEZ PARDOS, Carmen (Universität Siegen)

Contribution ID: 5

Type: **not specified**

Activity and Plans: Theoretical Particle Physics

Thursday, 15 February 2024 09:30 (1 hour)

Presenter: Prof. LENZ, Alexander (Siegen University)

Contribution ID: 7

Type: **not specified**

Strategy and Plans of the University

Thursday, 15 February 2024 12:00 (30 minutes)

Presenter: Prof. MANNEL, Thomas (TP1)

Contribution ID: 17

Type: **not specified**

Reporting by the parallel groups (10 min each)

Contribution ID: 19

Type: **not specified**

Opening of the Parallel Session: Top Bottom BSM

Thursday, 15 February 2024 13:30 (10 minutes)

General Intro, Goals and Outline

Primary author: FELDMANN, Thorsten (CPPS Siegen)

Co-author: Prof. CRISTINZIANI, Markus (Universität Siegen)

Presenters: Prof. CRISTINZIANI, Markus (Universität Siegen); FELDMANN, Thorsten (CPPS Siegen)

Session Classification: Parallel 2

Contribution ID: 20

Type: **not specified**

Monte Carlo (Whizard)

Thursday, 15 February 2024 16:45 (10 minutes)

Presenter: KILLAN, Wolfgang (University of Siegen)

Session Classification: Parallel 3

Contribution ID: 21

Type: **not specified**

Loop Calculations

Thursday, 15 February 2024 16:30 (10 minutes)

Presenter: HUBER, Tobias (University of Siegen)

Session Classification: Parallel 3

Contribution ID: 22

Type: **not specified**

Scientific Computing for Astroparticle Physics / Auger

Thursday, 15 February 2024 17:45 (10 minutes)

Presenter: Dr NIECHCIOL, Marcus (Experimentelle Astroteilchenphysik)

Session Classification: Parallel 3

Contribution ID: 23

Type: **not specified**

Lattice Field Theory

Thursday, 15 February 2024 17:30 (10 minutes)

Presenter: WITZEL, Oliver (Universität Siegen)

Session Classification: Parallel 3

Contribution ID: 24

Type: **not specified**

Data Processing in ATLAS

Thursday, 15 February 2024 17:00 (10 minutes)

Presenter: WALKOWIAK, Wolfgang (Experimentelle Teilchen- und Astroteilchenphysik, Universität Siegen)

Session Classification: Parallel 3

Contribution ID: 25

Type: **not specified**

Monte Carlo Production in ATLAS

Thursday, 15 February 2024 17:15 (10 minutes)

Presenter: VOSS, Katharina (Universität Siegen)

Session Classification: Parallel 3

Contribution ID: 27

Type: **not specified**

tt -> heavy neutral leptons

Thursday, 15 February 2024 13:40 (15 minutes)

Presenter: ZHAO, Tongbin (Siegen University)

Session Classification: Parallel 2

Contribution ID: 28

Type: **not specified**

t t -> lepton flavour violation

Thursday, 15 February 2024 14:02 (15 minutes)

Presenter: GOMES DA SILVA, Gabriel (Universität Siegen)

Session Classification: Parallel 2

Contribution ID: **30**

Type: **not specified**

Discussion of presentation

Session Classification: Parallel 2

Contribution ID: 31

Type: **not specified**

Making friends with flavour structure in BSM

Friday, 16 February 2024 11:22 (15 minutes)

Presenter: TONG, Tom (Universität Siegen)

Session Classification: Parallel 2

Contribution ID: **32**

Type: **not specified**

EFT fits

Friday, 16 February 2024 11:44 (15 minutes)

Presenter: HAHN, Jan Joachim (Universität Siegen, Experimentelle Teilchenphysik)

Session Classification: Parallel 2

Contribution ID: 33

Type: **not specified**

Interface between B-meson and top physics observables

Friday, 16 February 2024 12:06 (15 minutes)

Presenter: TETLALMATZI-XOLOCOTZI, Gilberto (Siegen/Orsay)

Session Classification: Parallel 2

Contribution ID: **34**

Type: **not specified**

Introduction

Thursday, 15 February 2024 16:30 (15 minutes)

Presenter: Dr NIECHCIOL, Marcus (Experimentelle Astroteilchenphysik)

Session Classification: Parallel 5

Contribution ID: 35

Type: **not specified**

Super-Heavy Dark Matter

Thursday, 15 February 2024 16:45 (15 minutes)

Presenter: TONG, Tom (Universität Siegen)

Session Classification: Parallel 5

Contribution ID: **36**

Type: **not specified**

Lorentz Violation

Thursday, 15 February 2024 17:00 (15 minutes)

Presenter: Dr NIECHCIOL, Marcus (Experimentelle Astroteilchenphysik)

Session Classification: Parallel 5

Contribution ID: 37

Type: **not specified**

Photon PeVatrons

Thursday, 15 February 2024 17:15 (15 minutes)

Presenter: PAPIOR, Chiara (Universität Siegen)

Session Classification: Parallel 5

Contribution ID: **38**

Type: **not specified**

Discussions

Thursday, 15 February 2024 17:30 (30 minutes)

Session Classification: Parallel 5

Contribution ID: 39

Type: **not specified**

Goals of the Standard Model Session

Thursday, 15 February 2024 13:30 (10 minutes)

Presenters: DIEZ PARDOS, Carmen (Universität Siegen); BELL, Guido (University of Siegen)

Session Classification: Parallel 1

Contribution ID: 40

Type: **not specified**

Top quark measurements: (some) general aspects

Thursday, 15 February 2024 14:30 (15 minutes)

Presenter: DIEZ PARDOS, Carmen (Universität Siegen)

Session Classification: Parallel 1

Contribution ID: 41

Type: **not specified**

Inclusive rare B decays

Thursday, 15 February 2024 14:05 (15 minutes)

Presenter: JENKINS, Jack (University of Siegen)

Session Classification: Parallel 1

Contribution ID: 43

Type: **not specified**

Introduction

Thursday, 15 February 2024 16:30 (1 minute)

Presenter: GUIDO, Eleonora (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 44

Type: **not specified**

Data analyses in astroparticle physics

Thursday, 15 February 2024 16:31 (5 minutes)

Presenter: GUIDO, Eleonora (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 45

Type: **not specified**

Non-leptonic amplitudes from fits to data

Thursday, 15 February 2024 16:40 (20 minutes)

Presenter: TETLALMATZI-XOLOCOTZI, Gilberto (Siegen/Orsay)

Session Classification: Parallel 4

Contribution ID: 46

Type: **not specified**

Machine Learning

Session Classification: Parallel 4

Contribution ID: 47

Type: **not specified**

QCD and resummation

Friday, 16 February 2024 11:00 (15 minutes)

Presenter: BELL, Guido (University of Siegen)

Session Classification: Parallel 1

Contribution ID: 48

Type: **not specified**

Modelling of top quark pairs

Friday, 16 February 2024 11:25 (15 minutes)

Presenter: VOSS, Katharina (Universität Siegen)

Session Classification: Parallel 1

Contribution ID: 49

Type: **not specified**

Monte Carlo (Whizard)

Friday, 16 February 2024 11:50 (15 minutes)

Presenter: KILLAN, Wolfgang (University of Siegen)

Session Classification: Parallel 1

Contribution ID: 50

Type: **not specified**

Signal+Background fits using smooth PDFs and HistFactory

Thursday, 15 February 2024 17:00 (5 minutes)

Presenter: BISWAS, Diptaparna (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 51

Type: **not specified**

Profile likelihood unfolding

Thursday, 15 February 2024 17:05 (5 minutes)

Presenter: MONDAL, Buddhadeb (University of Siegen)

Session Classification: Parallel 4

Contribution ID: 52

Type: **not specified**

EFTfitter: Interpreting measurements in the context of EFT

Thursday, 15 February 2024 17:10 (5 minutes)

Presenter: HAHN, Jan Joachim (Universität Siegen, Experimentelle Teilchenphysik)

Session Classification: Parallel 4

Contribution ID: 53

Type: **not specified**

CNNs applied to a photon search in Auger

Thursday, 15 February 2024 17:25 (10 minutes)

Presenter: GUIDO, Eleonora (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 54

Type: **not specified**

Signal/Background separation using BDT and hyperparameter optimization

Thursday, 15 February 2024 17:35 (5 minutes)

Presenter: GHOSAL, Arpan (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 55

Type: **not specified**

Jet flavour tagging using Deep Sets and GNN

Thursday, 15 February 2024 17:40 (5 minutes)

Presenter: BISWAS, Diptaparna (Universität Siegen)

Session Classification: Parallel 4

Contribution ID: 56

Type: **not specified**

Beyond the SM - Theory Intro

Friday, 16 February 2024 11:00 (15 minutes)

Presenter: FELDMANN, Thorsten (CPPS Siegen)

Session Classification: Parallel 2

Contribution ID: 57

Type: **not specified**

Resources and Skills

Friday, 16 February 2024 11:00 (30 minutes)

Presenters: WITZEL, Oliver (Universität Siegen); WALKOWIAK, Wolfgang (Experimentelle Teilchen- und Astroteilchenphysik, Universität Siegen)

Session Classification: Parallel 3+4

Contribution ID: 58

Type: **not specified**

Discussion

Friday, 16 February 2024 11:30 (1 hour)

Session Classification: Parallel 3+4

Contribution ID: 59

Type: **not specified**

Instrumentation

Friday, 16 February 2024 13:30 (10 minutes)

Presenter: DOROSTI, Qader (Experimental particle and astroparticle physics)

Session Classification: Plenary

Contribution ID: **60**

Type: **not specified**

Parallel 1 top-bottom SM

Friday, 16 February 2024 13:40 (10 minutes)

Presenters: DIEZ PARDOS, Carmen (Universität Siegen); BELL, Guido (University of Siegen)

Session Classification: Plenary

Contribution ID: 61

Type: **not specified**

Parallel 2 top-bottom BSM

Friday, 16 February 2024 13:50 (10 minutes)

Presenters: Prof. CRISTINZIANI, Markus (Universität Siegen); FELDMANN, Thorsten (CPPS Siegen)

Session Classification: Plenary

Contribution ID: 62

Type: **not specified**

Parallel 3 Scientific Computing

Friday, 16 February 2024 14:00 (10 minutes)

Presenters: WITZEL, Oliver (Universität Siegen); WALKOWIAK, Wolfgang (Experimentelle Teilchen- und Astroteilchenphysik, Universität Siegen)

Session Classification: Plenary

Contribution ID: **63**

Type: **not specified**

Parallel 4 Data Analysis and Fits

Friday, 16 February 2024 14:10 (10 minutes)

Presenters: BISWAS, Diptaparna (Universität Siegen); GUIDO, Eleonora (Universität Siegen); TET-LALMATZI-XOLOCOTZI, Gilberto (Siegen/Orsay)

Session Classification: Plenary

Contribution ID: 64

Type: **not specified**

Parallel 5 Astroparticle Physics

Friday, 16 February 2024 14:20 (10 minutes)

Presenters: RISSE, Markus (Universität Siegen); TONG, Tom (Universität Siegen)

Session Classification: Plenary