

ICFA Seminar 2023



Report of Contributions

Contribution ID: 1

Type: **not specified**

Electroweak physics at the LHC (including top mass and top properties)

Tuesday 28 November 2023 09:15 (25 minutes)

Presenter: LI, Qiang

Session Classification: Higgs and electroweak physics

Contribution ID: 2

Type: **not specified**

Characterizing the Higgs boson - present and future

Tuesday 28 November 2023 09:40 (25 minutes)

Presenter: HEIM, Sarah (ATLAS (ATLAS Dark Matter with Higgs))

Session Classification: Higgs and electroweak physics

Contribution ID: 3

Type: **not specified**

Searches for BSM Higgs bosons and di-Higgs production

Tuesday 28 November 2023 10:05 (25 minutes)

Presenter: WOLF, Roger (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Higgs and electroweak physics

Contribution ID: 4

Type: **not specified**

Higgs theory perspective

Tuesday 28 November 2023 10:30 (25 minutes)

Presenter: DE FLORIAN, Daniel (Universidad de San Martin)

Session Classification: Higgs and electroweak physics

Contribution ID: 5

Type: **not specified**

The Theory Landscape of Dark Matter

Tuesday 28 November 2023 11:30 (25 minutes)

Presenter: HOCHBERG, Yonit

Session Classification: Dark matter

Contribution ID: 6

Type: **not specified**

Status of WIMP Searches: from deep underground and the sky

Tuesday 28 November 2023 11:55 (25 minutes)

Presenter: LIU, Jianglai

Session Classification: Dark matter

Contribution ID: 7

Type: **not specified**

Searches for axions and other low-mass dark matter candidates

Tuesday 28 November 2023 12:20 (25 minutes)

Presenter: LINDNER, Axel (ALPS (ALPS _ Any Light Particle Search))

Session Classification: Dark matter

Contribution ID: 8

Type: **not specified**

Organisation of Detector Research and Development for futur HEP projects

Tuesday 28 November 2023 14:00 (20 minutes)

Presenter: CONTARDO, Didier (CNRS)

Session Classification: Detector R&D

Contribution ID: 9

Type: **not specified**

Detector R&D: tracking detectors and particle ID

Tuesday 28 November 2023 14:20 (20 minutes)

Presenter: BORTOLETTO, Daniela

Session Classification: Detector R&D

Contribution ID: **10**

Type: **not specified**

Detector R&D: calorimetry and liquid detectors

Tuesday 28 November 2023 14:40 (20 minutes)

Presenter: MONROE, Jocelyn (RHUL)

Session Classification: Detector R&D

Contribution ID: 11

Type: **not specified**

Quantum sensors and emerging technologies

Tuesday 28 November 2023 15:00 (20 minutes)

Presenters: FUJIWARA, Makoto; FUJIWARA, Makoto (TRIUMF)

Session Classification: Detector R&D

Contribution ID: 12

Type: **not specified**

Developments in electronics for HEP

Tuesday 28 November 2023 15:20 (20 minutes)

Presenter: VASEY, Francois (CERN)

Session Classification: Detector R&D

Contribution ID: 13

Type: **not specified**

Theoretical perspective on neutrino physics

Tuesday 28 November 2023 16:15 (25 minutes)

Presenter: MACHADO, Pedro (Fermilab)

Session Classification: Neutrino physics

Contribution ID: 14

Type: **not specified**

Neutrino mass measurements and neutrino-less double beta decay

Tuesday 28 November 2023 16:40 (25 minutes)

Presenter: WEINHEIMER, Christian (Westfälische Wilhelms-Universität Münster, Institut für Kernphysik)

Session Classification: Neutrino physics

Contribution ID: 15

Type: **not specified**

Status of neutrino oscillations (long baseline and reactor experiments)

Tuesday 28 November 2023 17:05 (25 minutes)

Presenter: ICHIKAWA, Atsuko

Session Classification: Neutrino physics

Contribution ID: 16

Type: **not specified**

Neutrino physics beyond the current paradigm (short baseline, reactors, ...)

Tuesday 28 November 2023 17:30 (25 minutes)

Presenter: TOUPS, Matt (FNAL)

Session Classification: Neutrino physics

Contribution ID: 17

Type: **not specified**

Theoretical perspectives on flavour physics

Wednesday 29 November 2023 09:00 (25 minutes)

Presenter: TEIXEIRA, Ana M. (LPC Clermont)

Session Classification: Flavour physics

Contribution ID: **18**

Type: **not specified**

Quark flavour physics experiments: rare processes

Wednesday 29 November 2023 09:45 (20 minutes)

Presenter: SCHUNE, Marie-Helene (IJCLab)

Session Classification: Flavour physics

Contribution ID: **19**

Type: **not specified**

Lepton flavour experiments

Wednesday 29 November 2023 10:05 (20 minutes)

Presenter: NISHIGUCHI, Hajime

Session Classification: Flavour physics

Contribution ID: 20

Type: **not specified**

Electromagnetic dipole moments

Wednesday 29 November 2023 10:25 (20 minutes)

Presenter: SIANG KHAW, Kim

Session Classification: Flavour physics

Contribution ID: 21

Type: **not specified**

Challenges in HEP computing for the next decade

Wednesday 29 November 2023 11:15 (30 minutes)

Presenter: KERSEVAN, Borut

Session Classification: Computing and software

Contribution ID: 22

Type: **not specified**

HEP software - status and future

Wednesday 29 November 2023 11:45 (25 minutes)

Presenter: Dr STEWART, Graeme Andrew (CERN)

Session Classification: Computing and software

Contribution ID: 23

Type: **not specified**

Machine learning and AI for HEP

Wednesday 29 November 2023 12:10 (25 minutes)

Presenter: HEINRICH, Lukas (CERN)

Session Classification: Computing and software

Contribution ID: 24

Type: **not specified**

Quantum computing and HEP

Wednesday 29 November 2023 12:35 (25 minutes)

Presenter: LUCCHESI, Donatella (University and INFN of Padova)

Session Classification: Computing and software

Contribution ID: 25

Type: **not specified**

QCD at high energies

Wednesday 29 November 2023 14:00 (25 minutes)

Presenter: KEPKA, Oldrich

Session Classification: QCD

Contribution ID: 26

Type: **not specified**

Deep Inelastic Scattering and Hadronic Structure

Wednesday 29 November 2023 14:25 (25 minutes)

Presenter: NEWMAN, Paul

Session Classification: QCD

Contribution ID: 27

Type: **not specified**

Theoretical perspectives on QCD

Wednesday 29 November 2023 14:50 (25 minutes)

Presenter: GEHRMANN, Thomas (University of Zurich)

Session Classification: QCD

Contribution ID: 28

Type: **not specified**

DEIA: Diversity, Equity, Inclusion and Access

Wednesday 29 November 2023 15:50 (20 minutes)

Presenter: ASSAMAGAN, Ketevi (BNL)

Session Classification: High-Energy Physics and Society

Contribution ID: 29

Type: **not specified**

Perspectives of early career scientists

Wednesday 29 November 2023 16:10 (20 minutes)

Presenters: BRENNER, Lydia; BRENNER, Lydia (Nikhef)

Session Classification: High-Energy Physics and Society

Contribution ID: **30**

Type: **not specified**

Outreach, communication and citizen science

Wednesday 29 November 2023 16:30 (20 minutes)

Presenter: ADAM, Claire

Session Classification: High-Energy Physics and Society

Contribution ID: 31

Type: **not specified**

Didactics and education

Session Classification: High-Energy Physics and Society

Contribution ID: **32**

Type: **not specified**

Sustainability of HEP

Wednesday 29 November 2023 16:50 (20 minutes)

Presenter: ROSER, Thomas (BNL)

Session Classification: High-Energy Physics and Society

Contribution ID: 33

Type: **not specified**

LHC and HL-LHC

Thursday 30 November 2023 08:30 (20 minutes)

Presenter: LAMONT, Mike (CERN)

Session Classification: Accelerators

Contribution ID: **34**

Type: **not specified**

SuperKEKB

Thursday 30 November 2023 08:50 (20 minutes)

Presenter: OHNISHI, Yuki Yoshi (BELLE (BELLE II Experiment))

Session Classification: Accelerators

Contribution ID: 35

Type: **not specified**

The Electron Ion Collider

Thursday 30 November 2023 09:10 (20 minutes)

Presenter: WILLEKE, Ferdi

Session Classification: Accelerators

Contribution ID: 36

Type: **not specified**

Research on high-field magnets

Thursday 30 November 2023 09:30 (20 minutes)

Presenters: BALLARINO, Amalia; GOURLAY, Stephen

Session Classification: Accelerators

Contribution ID: 37

Type: **not specified**

Super-conducting RF developments

Thursday 30 November 2023 09:50 (20 minutes)

Presenter: GENG, Rong-Li

Session Classification: Accelerators

Contribution ID: **38**

Type: **not specified**

Energy-recovery linac research and facilities

Thursday 30 November 2023 10:10 (20 minutes)

Presenter: KAABI, Walid

Session Classification: Accelerators

Contribution ID: 39

Type: **not specified**

Linear collider proposals

Thursday 30 November 2023 11:00 (25 minutes)

Presenter: STAPNES, Steinar (CERN)

Session Classification: Accelerators

Contribution ID: 40

Type: **not specified**

The CEPC and SppC proposals

Thursday 30 November 2023 11:25 (20 minutes)

Presenter: GAO, Jie

Session Classification: Accelerators

Contribution ID: 41

Type: **not specified**

The CERN Future Circular Collider study

Thursday 30 November 2023 11:45 (20 minutes)

Presenter: ZIMMERMANN, Frank (CERN)

Session Classification: Accelerators

Contribution ID: 42

Type: **not specified**

Muon collider design studies

Thursday 30 November 2023 12:05 (20 minutes)

Presenter: PASTRONE, Nadia

Session Classification: Accelerators

Contribution ID: 43

Type: **not specified**

Wakefield acceleration

Thursday 30 November 2023 12:25 (20 minutes)

Presenter: PIOT, Philippe (Northern Illinois University)

Session Classification: Accelerators

Contribution ID: 44

Type: **not specified**

Theory perspective on cosmology and astrophysical phenomena

Friday 1 December 2023 08:30 (25 minutes)

Presenter: KRNJAIC, Gordan (FNAL)

Session Classification: Cosmology, astroparticle physics and astronomy

Contribution ID: 45

Type: **not specified**

Observational cosmology

Friday 1 December 2023 08:55 (25 minutes)

Presenters: VIEREGG, Abigail (University of Chicago); VIEREGG, Abigail (University of Chicago)

Session Classification: Cosmology, astroparticle physics and astronomy

Contribution ID: 46

Type: **not specified**

Gravitational waves

Friday 1 December 2023 09:20 (25 minutes)

Presenter: NISSANKE, Samaya

Session Classification: Cosmology, astroparticle physics and astronomy

Contribution ID: 47

Type: **not specified**

Astroparticle physics and the multi-messenger approach

Friday 1 December 2023 09:45 (25 minutes)

Presenter: AGUILAR SANCHEZ, Juan Antonio

Session Classification: Cosmology, astroparticle physics and astronomy

Contribution ID: 48

Type: **not specified**

Theory perspective: the big picture and the big questions

Friday 1 December 2023 12:00 (25 minutes)

Presenter: DVALI, Georgi (LMU)

Session Classification: BSM physics

Contribution ID: 49

Type: **not specified**

Searches for new resonances

Friday 1 December 2023 11:10 (25 minutes)

Presenter: SAOULIDOU, Niki (CERN)

Session Classification: BSM physics

Contribution ID: 50

Type: **not specified**

Searching for the unknown: other direct searches

Friday 1 December 2023 11:35 (25 minutes)

Presenter: SIMONIELLO, Rosa

Session Classification: BSM physics

Contribution ID: 51

Type: **not specified**

What can we learn about new physics through precision measurements?

Friday 1 December 2023 10:45 (25 minutes)

Presenter: GORI, Stefania

Session Classification: BSM physics

Contribution ID: 52

Type: **not specified**

The future of HEP: Our motivation

Thursday 30 November 2023 14:00 (30 minutes)

Presenter: SALAM, Gavin (University of Oxford)

Session Classification: Overview presentations and world region reports

Contribution ID: 53

Type: **not specified**

Regional perspectives: Asia

Thursday 30 November 2023 14:30 (25 minutes)

Presenter: TAYLOR, Geoffrey (U Melbourne)

Session Classification: Overview presentations and world region reports

Contribution ID: 54

Type: **not specified**

Regional perspectives: The Americas

Thursday 30 November 2023 14:55 (25 minutes)

Presenter: MURAYAMA, Hitoshi (University of California Berkeley, Lawrence Berkeley National Laboratory, Kavli IPMU Tokyo)

Session Classification: Overview presentations and world region reports

Contribution ID: 55

Type: **not specified**

Regional perspectives: Europe

Thursday 30 November 2023 15:20 (25 minutes)

Presenter: JAKOBS, Karl (University of Freiburg)

Session Classification: Overview presentations and world region reports

Contribution ID: 56

Type: **not specified**

Quark flavour physics experiments: CP violation

Wednesday 29 November 2023 09:25 (20 minutes)

Presenter: NISHIDA, Shohei (BELLE (BELLE II Experiment))

Session Classification: Flavour physics

Contribution ID: 57

Type: **not specified**

Welcome to DESY

Tuesday 28 November 2023 08:45 (5 minutes)

Presenter: HEINEMANN, Beate (DESY and University of Freiburg (Germany))

Session Classification: Welcome, greetings and introduction to the seminar

Contribution ID: 58

Type: **not specified**

Welcome words by Prof. Otmar Wiestler, President of the Helmholtz Association

Tuesday 28 November 2023 08:50 (5 minutes)

Session Classification: Welcome, greetings and introduction to the seminar

Contribution ID: 59

Type: **not specified**

Welcome by Stuart Henderson, Chair of the International Committee for Future Accelerators ICFA

Tuesday 28 November 2023 08:55 (10 minutes)

Presenter: HENDERSON, Stuart (JLAB)

Session Classification: Welcome, greetings and introduction to the seminar

Contribution ID: **60**

Type: **not specified**

Organisational remarks

Tuesday 28 November 2023 09:05 (10 minutes)

Presenter: SCHÖRNER, Thomas (DESY)

Session Classification: Welcome, greetings and introduction to the seminar