

A detector for a Higgs factory and beyond: ILD



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome, Status of ILD

Monday, 15 January 2024 13:00 (30 minutes)

Presenters: KAWAGOE, Kiyotomo (Kyushu University); BEHNKE, Ties

Session Classification: Plenary

Contribution ID: 2

Type: **not specified**

ILD: Status and recent activities

Session Classification: Plenary

Contribution ID: 3

Type: **not specified**

Experimentation at the FCC-ee: Challenges and Opportunities

Monday, 15 January 2024 13:30 (30 minutes)

Presenter: ALEKSA, Martin (CERN)

Session Classification: Plenary

Contribution ID: 4

Type: **not specified**

Experimentation at an asymmetric Higgs factory

Monday, 15 January 2024 14:00 (30 minutes)

Presenter: LAUDRAIN, Antoine (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary

Contribution ID: 6

Type: **not specified**

IDT news

Monday, 15 January 2024 14:30 (30 minutes)

Presenter: STAPNES, Steinar (CERN)

Session Classification: Plenary

Contribution ID: 7

Type: **not specified**

Linking ILD to the DRD Organisation

Tuesday, 16 January 2024 11:40 (20 minutes)

Presenter: CONTARDO, Didier

Session Classification: Plenary

Contribution ID: 8

Type: **not specified**

ECFA Focus topics

Tuesday, 16 January 2024 12:30 (30 minutes)

Presenter: LIST, Jenny (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary

Contribution ID: 9

Type: **not specified**

Priorities for the future analyses in ILD

Wednesday, 17 January 2024 09:00 (30 minutes)

Presenter: ZARNECKI, Aleksander Filip (University of Warsaw)

Session Classification: Plenary

Contribution ID: **10**

Type: **not specified**

highlights

Session Classification: Plenary

Contribution ID: 11

Type: **not specified**

An ILD detector variant at CEPC

Tuesday, 16 January 2024 09:00 (30 minutes)

Presenter: RUAN, Manqi (IHEP-LLR/CERN)

Session Classification: Plenary

Contribution ID: 12

Type: **not specified**

CLD: A detector for the FCC-ee

Tuesday, 16 January 2024 09:30 (30 minutes)

Presenter: SAILER, Andre (CERN)

Session Classification: Plenary

Contribution ID: 13

Type: **not specified**

ILD concept development and simulation models

Tuesday, 16 January 2024 10:00 (30 minutes)

Presenter: JEANS, Daniel

Session Classification: Plenary

Contribution ID: 14

Type: **not specified**

Key4hep and ILD software

Tuesday, 16 January 2024 11:00 (20 minutes)

Presenter: MADLENER, Thomas (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary

Contribution ID: 15

Type: **not specified**

discussion: transition to key4hep

Wednesday, 17 January 2024 11:45 (20 minutes)

Session Classification: Plenary

Contribution ID: 16

Type: **not specified**

(High level) reconstruction in ILD

Tuesday, 16 January 2024 11:20 (20 minutes)

Presenter: GAEDE, Frank

Session Classification: Plenary

Contribution ID: 17

Type: **not specified**

Electronics as a driver for future detectors

Tuesday, 16 January 2024 12:00 (30 minutes)

Presenter: DE LA TAILLE, Christophe (OMEGA (FR))

Session Classification: Plenary

Contribution ID: **18**

Type: **not specified**

Final results from stau analysis

Wednesday, 17 January 2024 09:30 (20 minutes)

Presenter: BERGGREN, Mikael (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary

Contribution ID: 19

Type: **not specified**

Probing Gauge-Higgs Unification models at the ILC with di-quark forward-backward asymmetry at center-of-mass energies above the Z mass.

Wednesday, 17 January 2024 09:50 (20 minutes)

Primary authors: IRLES, Adrian (IFIC (CSIC/UV) Valencia); MÁRQUEZ HERNÁNDEZ, Jesús P. (IFIC (CSIC/UV))

Presenters: IRLES, Adrian (IFIC (CSIC/UV) Valencia); MÁRQUEZ HERNÁNDEZ, Jesús P. (IFIC (CSIC/UV))

Session Classification: Plenary

Contribution ID: 20

Type: **not specified**

Probing CPV mixing in the Higgs sector in VBF at 1 TeV ILC

Wednesday, 17 January 2024 10:10 (20 minutes)

Primary authors: VUKASINOVIC, Natasa (University of Belgrade (RS)); VUKASINOVIC, Natasa (VINCA Institute of Nuclear Sciences, University of Belgrade)

Presenters: VUKASINOVIC, Natasa (University of Belgrade (RS)); VUKASINOVIC, Natasa (VINCA Institute of Nuclear Sciences, University of Belgrade)

Session Classification: Plenary

Contribution ID: **21**

Type: **not specified**

TPC-Introduction

Monday, 15 January 2024 15:30 (20 minutes)

Presenters: COLAS, Paul (DAPNIA - Centre d'Etudes de Saclay (CEN Saclay)); COLAS, Paul (Université Paris-Saclay (FR))

Session Classification: Parallel 1

Contribution ID: 22

Type: **not specified**

TPC in a circular collider environment

Monday, 15 January 2024 15:50 (20 minutes)

Presenters: JEANS, Daniel; JEANS, Daniel (High Energy Accelerator Research Organization (JP))

Session Classification: Parallel 1

Contribution ID: 23

Type: **not specified**

The Alice TPC in lead-lead collisions at LHC RUN3 : space-charge corrections

Monday, 15 January 2024 16:10 (20 minutes)

Presenter: KLEINER, Matthias (Goethe University Frankfurt (DE))

Session Classification: Parallel 1

Contribution ID: 24

Type: **not specified**

Status of Pixel TPC R&D

Monday, 15 January 2024 16:30 (20 minutes)

Presenter: KLUIT, Peter (Nikhef National institute for subatomic physics (NL))

Session Classification: Parallel 1

Contribution ID: 25

Type: **not specified**

Gating ideas and gating discussion

Monday, 15 January 2024 16:50 (20 minutes)

Presenter: SETTLES, Ron

Session Classification: Parallel 1

Contribution ID: 26

Type: **not specified**

CMOS technology Overview

Monday, 15 January 2024 17:10 (20 minutes)

Presenter: WINTER, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 1

Contribution ID: 27

Type: **not specified**

Adding precise timing to detectors (T.b.c)

Monday, 15 January 2024 17:30 (20 minutes)

Presenters: KRUEGER, Katja (DESY); KRUGER, Katja (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Parallel 1

Contribution ID: 28

Type: **not specified**

Calorimeters for ILD

Tuesday, 16 January 2024 16:00 (30 minutes)

Presenter: BOUDRY, Vincent (LLR – Institut Polytechnique de Paris / CNRS-IN2P3)

Session Classification: Parallel 1

Contribution ID: 29

Type: **not specified**

Rates on Calorimeters in the several energy scenarios

Tuesday, 16 January 2024 16:30 (20 minutes)

Presenters: MEKHEMAR, Khalid (University of Hawaii at Manoa); BOUDRY, Vincent (LLR – Institut Polytechnique de Paris / CNRS-IN2P3)

Session Classification: Parallel 1

Contribution ID: **30**

Type: **not specified**

Importance of the performance on jets reconstruction at 250 GeV center of mass

Tuesday, 16 January 2024 16:50 (30 minutes)

Presenter: BRIENT, Jean-Claude (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 1

Contribution ID: **31**

Type: **not specified**

Discussion time

Monday, 15 January 2024 17:50 (40 minutes)

Session Classification: Parallel 1

Contribution ID: 32

Type: **not specified**

Key4hep transition for ILD

Monday, 15 January 2024 15:30 (1 hour)

- transition of ILD production software to key4hep
- run MarlinWrapper for existing reconstruction
 - from now on ?
- develop new algorithms in Gaudi/EDM4hep ?
- create EDM4hep for new productions ?
- related topics:
 - (automated) validation w/ ILDPerformance
 - adaptation of ILD production scripts in ILCDirac
 - ilcinstall vs. spack installations (source code, directory layout,...)

Presenters: HENSEL, Carsten (CBPF - Brazilian Center for Physics Research (BR)); JEANS, Daniel; GAEDE, Frank

Session Classification: Parallel 2

Contribution ID: 33

Type: **not specified**

Flavour tagging tools

Monday, 15 January 2024 17:00 (1 hour)

- ML inference in Marlin/Gaudi
 - using libtorch, ONNX,...
- implementation of ParticleTransformer in Key4hep (FCC)
- comparison to FCC results -....

Presenters: MEYER, Mareike; SUEHARA, Taikan (ICEPP, The University of Tokyo)

Session Classification: Parallel 2

Contribution ID: **34**

Type: **not specified**

Discussion time

Tuesday, 16 January 2024 17:20 (25 minutes)

Session Classification: Parallel 1

Contribution ID: 35

Type: **not specified**

New ideas on forward calorimeter design for ILD

Tuesday, 16 January 2024 14:00 (20 minutes)

Presenter: WILSON, Graham (The University of Kansas (US))

Session Classification: Parallel 3

Contribution ID: 36

Type: **not specified**

Adapting the ILD vertex detector to FCCee context and related R&D

Tuesday, 16 January 2024 14:20 (20 minutes)

Presenter: BESSON, Auguste Guillaume (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 3

Contribution ID: 37

Type: **not specified**

New particle identification calibration for ILD

Tuesday, 16 January 2024 14:40 (20 minutes)

Presenter: EINHAUS, Ulrich (DESY)

Session Classification: Parallel 3

Contribution ID: **38**

Type: **not specified**

Improvements in V0 performance

Tuesday, 16 January 2024 15:00 (15 minutes)

Presenters: AUMILLER, Sara (DESY); EINHAUS, Ulrich (DESY)

Session Classification: Parallel 3

Contribution ID: 39

Type: **not specified**

Status of pixel TPC reconstruction

Tuesday, 16 January 2024 15:15 (15 minutes)

Presenter: KLAMKA, Jan (University of Warsaw)

Session Classification: Parallel 3

Contribution ID: 40

Type: **not specified**

Focus topic reports

Tuesday, 16 January 2024 16:00 (1 hour)

Presenters: IRLES, Adrian (IFIC (CSIC/UV) Valencia); ZARNECKI, Aleksander Filip (University of Warsaw); WILSON, Graham (The University of Kansas (US)); BOZOVIC-JELISAVCIC, Ivanka (University of Belgrade (RS)); LIST, Jenny (Deutsches Elektronen-Synchrotron (DE)); TIAN, Junping (University of Tokyo); VOS, Marcel (Univ. of Valencia and CSIC (ES)); NUNEZ PARDO DE VERA, Maria Teresa; SUEHARA, Taikan (ICEPP, The University of Tokyo); EINHAUS, Ulrich (DESY)

Session Classification: Parallel 3

Contribution ID: 41

Type: **not specified**

Focus topic discussion

Tuesday, 16 January 2024 17:00 (30 minutes)

Presenter: ZARNECKI, Aleksander Filip (University of Warsaw)

Session Classification: Parallel 3

Contribution ID: 42

Type: **not specified**

Exploring hidden sectors with two-particle angular correlations at future e^+e^- colliders

Tuesday, 16 January 2024 17:50 (20 minutes)

Presenter: MUSUMECI, Emanuela (Univ. of Valencia and CSIC (ES))

Session Classification: Parallel 3

Contribution ID: 43

Type: **not specified**

Optimizing the Higgs self-coupling measurement at ILC with ML

Tuesday, 16 January 2024 18:10 (20 minutes)

Presenter: BLIEWERT, Bryan

Session Classification: Parallel 3

Contribution ID: 44

Type: **not specified**

Discussion

Wednesday, 17 January 2024 12:05 (55 minutes)

Presenters: KAWAGOE, Kiyotomo (Kyushu University); BEHNKE, Ties

Session Classification: Plenary

Contribution ID: 45

Type: **not specified**

Instructions for dinner tonight

Tuesday, 16 January 2024 10:30 (1 minute)

Presenter: HENSEL, Carsten (CBPF - Brazilian Center for Physics Research (BR))

Session Classification: Plenary