

Corfu2024 Workshop on Future Accelerators

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Monday 20 May 2024 09:00 (15 minutes)

Presenter: ZOUPANOS, George (National Technical Univ. of Athens (GR))

Contribution ID: 2

Type: **not specified**

FCC physics and FCC feasibility study

Monday 20 May 2024 10:00 (45 minutes)

Author: GROJEAN, Christophe (DESY (Hamburg), Humboldt University (Berlin) and CERN)

Presenter: GROJEAN, Christophe (DESY (Hamburg), Humboldt University (Berlin) and CERN)

Contribution ID: 3

Type: **not specified**

Neutrino physics at future colliders

Monday 20 May 2024 17:30 (45 minutes)

Author: DEV, Bhupal (Washington University in St. Louis)

Presenter: DEV, Bhupal (Washington University in St. Louis)

Contribution ID: 4

Type: **not specified**

Higgs Physics: current status and prospects from the experiment side

Tuesday 21 May 2024 09:00 (45 minutes)

Author: QIU, Tong (The University of Edinburgh (GB))

Presenter: QIU, Tong (The University of Edinburgh (GB))

Contribution ID: 5

Type: **not specified**

Prospects for particle identification at FCC with the IDEA detector

Tuesday 21 May 2024 11:35 (45 minutes)

Author: COCCARO, Andrea (INFN Genova (IT))

Presenter: COCCARO, Andrea (INFN Genova (IT))

Contribution ID: 6

Type: **not specified**

Higgs factories

Tuesday 21 May 2024 10:30 (45 minutes)

Author: ROBSON, Aidan (University of Glasgow (GB))

Presenter: ROBSON, Aidan (University of Glasgow (GB))

Contribution ID: 7

Type: **not specified**

Future prospects for gravitational waves

Monday 20 May 2024 18:35 (45 minutes)

Author: CROON, Djuna (IPPP Durham)

Presenter: CROON, Djuna (IPPP Durham)

Contribution ID: 8

Type: **not specified**

Physics beyond Standard Model from the study of weak interactions

Presenter: STOICA, Sabin (IFIN-HH Bucharest (RO))

Contribution ID: 9

Type: **not specified**

Calorimeter developments for future collider experiments.

Monday 20 May 2024 12:45 (45 minutes)

Author: FOUZ IGLESIAS, Mary-Cruz (CIEMAT - Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Presenter: FOUZ IGLESIAS, Mary-Cruz (CIEMAT - Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Contribution ID: **10**

Type: **not specified**

Prospects of QCD/top physics at future accelerators.

Monday 20 May 2024 12:00 (45 minutes)

Author: FORTE, Stefano (Università degli Studi e INFN Milano (IT))

Presenter: FORTE, Stefano (Università degli Studi e INFN Milano (IT))

Contribution ID: 11

Type: **not specified**

Highlights and future perspectives of LHC experiments

Monday 20 May 2024 09:15 (45 minutes)

Author: JOVICEVIC, Jelena (Institute of Physics, University of Belgrade (RS))

Presenter: JOVICEVIC, Jelena (Institute of Physics, University of Belgrade (RS))

Contribution ID: 12

Type: **not specified**

BSM phenomenology at future accelerators

Tuesday 21 May 2024 16:45 (45 minutes)

Author: BAHL, Henning

Presenter: BAHL, Henning

Contribution ID: 13

Type: **not specified**

QCD/top physics: current status and prospects from the experiment side

Monday 20 May 2024 10:45 (45 minutes)

Author: KLUTH, Stefan (Max Planck Society (DE))

Presenter: KLUTH, Stefan (Max Planck Society (DE))

Contribution ID: 14

Type: **not specified**

Integrated Photonic Circuit Accelerator for Dark Matter Search

Thursday 23 May 2024 12:20 (45 minutes)

Author: ISCHEBECK, Rasmus (Paul Scherrer Institut)

Presenter: ISCHEBECK, Rasmus (Paul Scherrer Institut)

Contribution ID: 15

Type: **not specified**

The path towards the Future Circular Collider at CERN

Wednesday 22 May 2024 12:20 (45 minutes)

Author: TSESMELIS, Emmanuel (CERN)

Presenter: TSESMELIS, Emmanuel (CERN)

Contribution ID: 16

Type: **not specified**

BSM theory in the era of future accelerators

Tuesday 21 May 2024 17:30 (45 minutes)

Author: RIEMBAU, Marc (CERN)

Presenter: RIEMBAU, Marc (CERN)

Contribution ID: 17

Type: **not specified**

Higgs physics at future colliders

Tuesday 21 May 2024 09:45 (45 minutes)

Author: WEIGLEIN, Georg Ralf (Deutsches Elektronen-Synchrotron (DE))

Presenter: WEIGLEIN, Georg Ralf (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **18**

Type: **not specified**

Detectors for Higgs factory

Tuesday 21 May 2024 12:20 (45 minutes)

Author: FERRARI, Roberto (INFN Pavia (IT))

Presenter: FERRARI, Roberto (INFN Pavia (IT))

Contribution ID: 19

Type: **not specified**

Overview of the phase-2 upgrade of CMS detector

Tuesday 21 May 2024 13:05 (25 minutes)

Authors: PUROHIT, Arnab (Centre National de la Recherche Scientifique (FR)); PUROHIT, Arnab (Centre National de la Recherche Scientifique (FR))

Presenters: PUROHIT, Arnab (Centre National de la Recherche Scientifique (FR)); PUROHIT, Arnab (Centre National de la Recherche Scientifique (FR))

Contribution ID: 20

Type: **not specified**

Computing for the HL-LHC

Monday 20 May 2024 16:45 (45 minutes)

Author: CRÉPÉ-RENAUDIN, Sabine (LPSC-Grenoble, CNRS/IN2P3)

Presenter: CRÉPÉ-RENAUDIN, Sabine (LPSC-Grenoble, CNRS/IN2P3)

Contribution ID: 21

Type: **not specified**

Status and prospects of dark matter searches

Wednesday 22 May 2024 09:00 (45 minutes)

Author: MAHBUBANI, Rakhi (Rudjer Boskovic Institute (HR))

Presenter: MAHBUBANI, Rakhi (Rudjer Boskovic Institute (HR))

Contribution ID: 22

Type: **not specified**

Feebly-interacting particles at future colliders

Wednesday 22 May 2024 10:30 (45 minutes)

Authors: TROJANOWSKI, Sebastian (National Centre for Nuclear Research, Poland); TROJANOWSKI, Sebastian

Presenters: TROJANOWSKI, Sebastian (National Centre for Nuclear Research, Poland); TROJANOWSKI, Sebastian

Contribution ID: 23

Type: **not specified**

The storage ring proton EDM status and prospects

Wednesday 22 May 2024 11:35 (45 minutes)

Author: SEMERTZIDIS, Yannis (IBS/CAPP and KAIST in Republic of Korea (South Korea))

Presenter: SEMERTZIDIS, Yannis (IBS/CAPP and KAIST in Republic of Korea (South Korea))

Contribution ID: 24

Type: **not specified**

AWAKE: from proof-of-concept towards first particle-physics applications

Tuesday 21 May 2024 18:35 (45 minutes)

Author: FARMER, John Patrick (MPP / CERN)

Presenter: FARMER, John Patrick (MPP / CERN)

Contribution ID: 25

Type: **not specified**

DM phenomenology: Brief status

Wednesday 22 May 2024 09:45 (45 minutes)

Author: Dr PANCI, Paolo (Universita & INFN Pisa (IT))

Presenter: Dr PANCI, Paolo (Universita & INFN Pisa (IT))

Contribution ID: 26

Type: **not specified**

The ATLAS ITk strip detector for the phase-II LHC upgrade

Wednesday 22 May 2024 13:05 (25 minutes)

Author: ORDEK, Serhat (Deutsches Elektronen-Synchrotron (DE))

Presenter: ORDEK, Serhat (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: 27

Type: **not specified**

Advanced accelerators for future particle physics experiments

Monday 20 May 2024 16:00 (45 minutes)

Author: OSTERHOFF, Jens (Berkeley Lab)

Presenter: OSTERHOFF, Jens (Berkeley Lab)

Contribution ID: 28

Type: **not specified**

Detector concepts for future accelerators (like ILC, asymmetric Higgs factory)

Wednesday 22 May 2024 16:00 (45 minutes)

Authors: BUESSER, Karsten (DESY); BUESSER, Karsten Roland (Deutsches Elektronen-Synchrotron (DE))

Presenters: BUESSER, Karsten (DESY); BUESSER, Karsten Roland (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: 29

Type: **not specified**

Gaseous ionization detector developments for future collider experiments

Wednesday 22 May 2024 16:45 (45 minutes)

Authors: TITOV, Maksym (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR)); TITOV, Maksym (IRFU, CEA Saclay, Université Paris-Saclay (FR)); TITOV, Maxim (CEA Saclay)

Presenters: TITOV, Maksym (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR)); TITOV, Maksym (IRFU, CEA Saclay, Université Paris-Saclay (FR)); TITOV, Maxim (CEA Saclay)

Contribution ID: 30

Type: **not specified**

The LDG working group on sustainability assessment of future accelerators

Wednesday 22 May 2024 17:30 (45 minutes)

Authors: BLOISE, Caterina (INFN e Laboratori Nazionali di Frascati (IT)); BLOISE, Caterina (Laboratori Nazionali di Frascati (LNF))

Presenters: BLOISE, Caterina (INFN e Laboratori Nazionali di Frascati (IT)); BLOISE, Caterina (Laboratori Nazionali di Frascati (LNF))

Contribution ID: **31**

Type: **not specified**

ATLAS ITk Pixel Detector Overview

Thursday 23 May 2024 13:05 (25 minutes)

Author: THOMPSON, Emily Anne (Lawrence Berkeley National Lab (US))

Presenter: THOMPSON, Emily Anne (Lawrence Berkeley National Lab (US))

Contribution ID: 32

Type: **not specified**

Status and prospects of the flavour physics experimental programme

Thursday 23 May 2024 09:00 (45 minutes)

Author: PEPE-ALTARELLI, Monica (INFN e Laboratori Nazionali di Frascati (IT))

Presenter: PEPE-ALTARELLI, Monica (INFN e Laboratori Nazionali di Frascati (IT))

Contribution ID: 33

Type: **not specified**

Status and future accelerator prospects of flavor physics

Thursday 23 May 2024 10:30 (45 minutes)

Author: STEFANEK, Benjamin

Presenter: STEFANEK, Benjamin

Contribution ID: 34

Type: **not specified**

Flavor physics at future accelerators

Thursday 23 May 2024 09:45 (45 minutes)

Author: LIGETI, Zoltan

Presenter: LIGETI, Zoltan

Contribution ID: 35

Type: **not specified**

Neutrino physics: now and at future accelerators

Thursday 23 May 2024 11:35 (45 minutes)

Authors: BRDAR, Vedran (Oklahoma State University (US)); BRDAR, Vedran

Presenters: BRDAR, Vedran (Oklahoma State University (US)); BRDAR, Vedran

Contribution ID: 36

Type: **not specified**

Technical challenges and performance of the new ATLAS LAr calorimeter trigger

Friday 24 May 2024 13:05 (25 minutes)

Author: MWEWA, Chilufya (Brookhaven National Laboratory (US))

Presenter: MWEWA, Chilufya (Brookhaven National Laboratory (US))

Contribution ID: 37

Type: **not specified**

Future of Solid State detectors within DRD3 collaboration

Wednesday 22 May 2024 18:35 (30 minutes)

Author: VAROUCAS, Dimitris (Centre National de la Recherche Scientifique (FR), IJCLab-Orsay)

Presenter: VAROUCAS, Dimitris (Centre National de la Recherche Scientifique (FR), IJCLab-Orsay)

Contribution ID: **38**

Type: **not specified**

Electroweak physics: current status and prospects from the experiment side

Friday 24 May 2024 09:00 (45 minutes)

Author: BELLAN, Riccardo (Universita e INFN Torino (IT))

Presenter: BELLAN, Riccardo (Universita e INFN Torino (IT))

Contribution ID: 39

Type: **not specified**

SMEFT at future colliders

Friday 24 May 2024 10:30 (45 minutes)

Author: DURIEUX, Gauthier (CP3 - UCLouvain)

Presenter: DURIEUX, Gauthier (CP3 - UCLouvain)

Contribution ID: 40

Type: **not specified**

Positron sources for future lepton colliders

Friday 24 May 2024 09:45 (45 minutes)

Author: MOORTGAT-PICK, Gudrid

Presenter: MOORTGAT-PICK, Gudrid

Contribution ID: 41

Type: **not specified**

Electroweak physics at future accelerators

Friday 24 May 2024 11:35 (45 minutes)

Authors: PICCININI, Fulvio (Pavia University and INFN (IT)); PICCININI, Fulvio (Pavia University and INFN (IT))

Presenters: PICCININI, Fulvio (Pavia University and INFN (IT)); PICCININI, Fulvio (Pavia University and INFN (IT))

Contribution ID: 42

Type: **not specified**

Precision measurements at future colliders

Friday 24 May 2024 12:20 (45 minutes)

Authors: PANICO, Giuliano (ETH Zurich); PANICO, Giuliano (University of Florence and INFN Florence)

Presenters: PANICO, Giuliano (ETH Zurich); PANICO, Giuliano (University of Florence and INFN Florence)

Contribution ID: 43

Type: **not specified**

TBA

Presenter: TBA

Contribution ID: 44

Type: **not specified**

The status of AI/ML in HEP and the vision towards future accelerators

Friday 24 May 2024 16:00 (45 minutes)

Author: GOLLING, Tobias (Universite de Geneve (CH))

Presenter: GOLLING, Tobias (Universite de Geneve (CH))

Contribution ID: 45

Type: **not specified**

Quantum developments and potential synergies with future colliders

Friday 24 May 2024 16:45 (45 minutes)

Authors: SPANNOWSKY, Michael (IPPP Durham); SPANNOWSKY, Michael (University of Durham (GB)); SPANNOWSKY, Michael (IPPP Durham)

Presenters: SPANNOWSKY, Michael (IPPP Durham); SPANNOWSKY, Michael (University of Durham (GB)); SPANNOWSKY, Michael (IPPP Durham)

Contribution ID: 46

Type: **not specified**

Novel methods towards putting QFT on quantum computers

Friday 24 May 2024 17:30 (45 minutes)

Author: ABEL, Steven Adam (University of Durham (GB))

Presenter: ABEL, Steven Adam (University of Durham (GB))

Contribution ID: 47

Type: **not specified**

Physics potential of beam dump experiments at future accelerators

Saturday 25 May 2024 12:20 (45 minutes)

Authors: UEDA, Daiki (Technion- Israel Institute of Technology (IL)); UEDA, Daiki (SOKENDAI)

Presenters: UEDA, Daiki (Technion- Israel Institute of Technology (IL)); UEDA, Daiki (SOKENDAI)

Contribution ID: 48

Type: **not specified**

Simulating high-energy collision events with a quantum computer

Friday 24 May 2024 19:20 (30 minutes)

Authors: WILLIAMS, Simon (CERN); WILLIAMS, Simon (Imperial College London); WILLIAMS, Simon (CERN)

Presenters: WILLIAMS, Simon (CERN); WILLIAMS, Simon (Imperial College London); WILLIAMS, Simon (CERN)

Contribution ID: 49

Type: **not specified**

Physics at a future muon collider

Thursday 23 May 2024 16:45 (45 minutes)

Author: BUTTAZZO, Dario (Universita & INFN Pisa (IT))

Presenter: BUTTAZZO, Dario (Universita & INFN Pisa (IT))

Contribution ID: **50**

Type: **not specified**

Future calorimeters front end electronics

Thursday 23 May 2024 16:00 (45 minutes)

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

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

Contribution ID: 51

Type: **not specified**

Heavy ion physics: current status and prospects at future accelerators

Saturday 25 May 2024 09:45 (45 minutes)

Author: SOTO ONTOSO, Alba (CERN)

Presenter: SOTO ONTOSO, Alba (CERN)

Contribution ID: 52

Type: **not specified**

HL-LHC

Saturday 25 May 2024 11:35 (45 minutes)

Author: PAPAPHILIPPOU, Yannis (CERN)

Presenter: PAPAPHILIPPOU, Yannis (CERN)

Contribution ID: 53

Type: **not specified**

Using collider systems to search for new physics

Friday 24 May 2024 18:35 (45 minutes)

Author: PINFOLD, James (University of Alberta (CA))

Presenter: PINFOLD, James (University of Alberta (CA))

Contribution ID: 54

Type: **not specified**

Upgrade of CMS calorimeters for the Phase-2 LHC

Saturday 25 May 2024 13:05 (25 minutes)

Author: MILENOVIC, Predrag (University of Belgrade (RS))

Presenter: MILENOVIC, Predrag (University of Belgrade (RS))

Contribution ID: 55

Type: **not specified**

Future $e^+ e^-$ and muon colliders

Saturday 25 May 2024 16:00 (45 minutes)

Authors: MEADE, PATRICK (University of Wisconsin-Madison); MEADE, Patrick; MEADE, Patrick

Presenters: MEADE, PATRICK (University of Wisconsin-Madison); MEADE, Patrick; MEADE, Patrick

Contribution ID: 56

Type: **not specified**

Conference summary and outlook

Saturday 25 May 2024 16:45 (45 minutes)

Author: MANGANO, Michelangelo (CERN)

Presenter: MANGANO, Michelangelo (CERN)

Contribution ID: 57

Type: **not specified**

Beyond standard model searches: current status and prospects from the experiment side

Tuesday 21 May 2024 16:00 (45 minutes)

Author: FRANCHINI, Matteo (University of Bologna and INFN (IT))

Presenter: FRANCHINI, Matteo (University of Bologna and INFN (IT))

Contribution ID: 58

Type: **not specified**

Gamma factory

Saturday 25 May 2024 10:30 (45 minutes)

Authors: KRASNY, Mieczyslaw (Centre National de la Recherche Scientifique (FR)); KRASNY, Mieczyslaw (LPNHE, University Paris); KRASNY, Mieczyslaw Witold (LPNHE, Sorbonne University, Paris, Centre National de la Recherche Scientifique (FR) and CERN)

Presenters: KRASNY, Mieczyslaw (Centre National de la Recherche Scientifique (FR)); KRASNY, Mieczyslaw (LPNHE, University Paris); KRASNY, Mieczyslaw Witold (LPNHE, Sorbonne University, Paris, Centre National de la Recherche Scientifique (FR) and CERN)

Contribution ID: 59

Type: **not specified**

Detector challenges at a future muon collider

Thursday 23 May 2024 17:30 (45 minutes)

Author: PASTRONE, Nadia (Universita e INFN Torino (IT))

Presenter: PASTRONE, Nadia (Universita e INFN Torino (IT))

Contribution ID: **60**

Type: **not specified**

QCD/top physics in the era of future accelerators.

Saturday 25 May 2024 09:00 (45 minutes)

Author: MITOV, Alexander (University of Cambridge (GB))

Presenter: MITOV, Alexander (University of Cambridge (GB))