

FCCIS 2022 Workshop



Report of Contributions

Contribution ID: 1

Type: **not specified**

Scientific Advisory Committee Welcome

Presenter: PARKER, Andy (University of Cambridge (GB))

Session Classification: Plenary session

Contribution ID: 2

Type: **not specified**

FCC Study Status and Goals, FCCIS

Monday 5 December 2022 09:35 (30 minutes)

Presenter: BENEDIKT, Michael (CERN)

Session Classification: Plenary session

Contribution ID: 3

Type: **not specified**

Questions and discussion

Monday 5 December 2022 10:05 (10 minutes)

Session Classification: Plenary session

Contribution ID: 4

Type: **not specified**

The case for FCC-ee

Monday 5 December 2022 10:45 (45 minutes)

Presenters: GROJEAN, Christophe (DESY (Hamburg) and Humboldt University (Berlin)); JANOT, Patrick (CERN)

Session Classification: Plenary session

Contribution ID: 5

Type: **not specified**

FCC Accelerator status and R&D beyond FCCIS

Monday 5 December 2022 11:30 (45 minutes)

Presenter: RAUBENHEIMER, Tor (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session

Contribution ID: 6

Type: **not specified**

FCC Technical Infrastructure status

Monday 5 December 2022 13:30 (30 minutes)

Presenter: HANKE, Klaus (CERN)

Session Classification: Plenary session

Contribution ID: 7

Type: **not specified**

Updates of underground civil engineering layouts since the CDR

Monday 5 December 2022 14:00 (15 minutes)

Presenter: BROMLEY, Liam (CERN)

Session Classification: Plenary session

Contribution ID: 8

Type: **not specified**

FCCIS WP2 overview

Monday 5 December 2022 14:30 (30 minutes)

Presenter: AGAPOV, Ilya (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary session

Contribution ID: 9

Type: **not specified**

FCCIS WP3 overview

Monday 5 December 2022 15:00 (30 minutes)

Presenter: GUTLEBER, Johannes (CERN)

Session Classification: Plenary session

Contribution ID: **10**

Type: **not specified**

FCCIS WP4 overview

Monday 5 December 2022 16:00 (30 minutes)

Presenter: Dr SIRTORI, Emanuela (CSIL)

Session Classification: Plenary session

Contribution ID: **11**

Type: **not specified**

FCCIS WP5 overview

Monday 5 December 2022 16:30 (30 minutes)

Presenter: LESIAK, Tadeusz (Polish Academy of Sciences (PL))

Session Classification: Plenary session

Contribution ID: 14

Type: **not specified**

Progress on developing layouts for surface sites for FCC

Monday 5 December 2022 14:15 (15 minutes)

Presenter: MAYOUX, Antoine (CERN)

Session Classification: Plenary session

Contribution ID: **18**

Type: **not specified**

Optics overview

Tuesday 6 December 2022 09:00 (30 minutes)

Presenter: Dr OIDE, Katsunobu (High Energy Accelerator Research Organization (JP))

Session Classification: WP2 - Collider design

Contribution ID: 19

Type: **not specified**

Parameters & Challenges

Tuesday 6 December 2022 09:30 (30 minutes)

Presenter: SHATILOV, Dmitry (Budker Institute of Nuclear Physics (RU))

Session Classification: WP2 - Collider design

Contribution ID: **20**

Type: **not specified**

Tuning status

Tuesday 6 December 2022 10:00 (30 minutes)

Presenter: TOMAS GARCIA, Rogelio (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 21

Type: **not specified**

IP tuning

Tuesday 6 December 2022 11:00 (30 minutes)

Presenter: VAN RIESEN-HAUPT, Leon (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: WP2 - Collider design

Contribution ID: 22

Type: **not specified**

BI workshop summary

Tuesday 6 December 2022 11:30 (30 minutes)

Presenter: MAZZONI, Stefano (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 23

Type: **not specified**

Survey and alignment options for FCC

Tuesday 6 December 2022 13:30 (30 minutes)

Presenter: MAINAUD DURAND, Helene (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 24

Type: **not specified**

Optic subsystems integration and general considerations

Presenters: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US)); RAUBENHEIMER, Tor (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 25

Type: **not specified**

Arc half-cell configuration project & mock-up

Tuesday 6 December 2022 14:00 (30 minutes)

Presenter: CARRA, Federico (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 26

Type: **not specified**

Tunnel integration

Tuesday 6 December 2022 14:30 (30 minutes)

Presenter: VALCHKOVA, Fani (Sofia Technical University-Unknown-Unknown)

Session Classification: WP2 - Collider design

Contribution ID: 27

Type: **not specified**

Towards beam-beam simulations for FCC-ee

Tuesday 6 December 2022 15:30 (30 minutes)

Presenter: KICSINY, Peter (EPFL)

Session Classification: WP2 - Collider design

Contribution ID: 28

Type: **not specified**

Analytical Beam-Beam approach

Tuesday 6 December 2022 16:00 (30 minutes)

Co-author: BUFFAT, Xavier (CERN)

Presenter: LE NGUYEN NGUYEN, Khoi (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: WP2 - Collider design

Contribution ID: 29

Type: **not specified**

Beam-beam simulations

Tuesday 6 December 2022 16:30 (30 minutes)

Presenter: SHATILOV, Dmitry (Budker Institute of Nuclear Physics (RU))

Session Classification: WP2 - Collider design

Contribution ID: 30

Type: **not specified**

Impedance and collective effects

Wednesday 7 December 2022 09:00 (30 minutes)

Presenters: CARIDEO, Emanuela (Sapienza Universita e INFN, Roma I (IT)); MIGLIORATI, Mauro (Sapienza Universita e INFN, Roma I (IT))

Session Classification: WP2 - Collider design

Contribution ID: 31

Type: **not specified**

VACI-suite: A Versatile code to calculate resistive wall impedance and Wakefield in arbitrary cross-sections

Wednesday 7 December 2022 09:30 (30 minutes)

Presenter: RAJABI, Ali (DESY)

Session Classification: WP2 - Collider design

Contribution ID: **32**

Type: **not specified**

RF

Wednesday 7 December 2022 10:00 (30 minutes)

Presenter: Mr PEAUGER, Franck (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 33

Type: **not specified**

Collimation

Wednesday 7 December 2022 11:00 (30 minutes)

Presenter: ABRAMOV, Andrey (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 34

Type: **not specified**

Backgrounds

Wednesday 7 December 2022 11:30 (30 minutes)

Presenter: CIARMA, Andrea (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 35

Type: **not specified**

MDI workshop summary

Wednesday 7 December 2022 13:00 (30 minutes)

Presenter: BOSCOLO, Manuela (INFN e Laboratori Nazionali di Frascati (IT))

Session Classification: WP2 - Collider design

Contribution ID: **36**

Type: **not specified**

MDI mechanical model and mockup plans

Wednesday 7 December 2022 13:30 (30 minutes)

Presenter: FRANSESINI, Francesco

Session Classification: WP2 - Collider design

Contribution ID: 37

Type: **not specified**

Vibrations : evaluation of their impact

Wednesday 7 December 2022 14:00 (30 minutes)

Presenters: MONTBARBON, Eva (Centre National de la Recherche Scientifique (FR)); Mr GARBON, Stanislas

Session Classification: WP2 - Collider design

Contribution ID: **38**

Type: **not specified**

Vlasov solver for e-cloud & combined effects

Wednesday 7 December 2022 15:00 (30 minutes)

Presenter: JOHANNESSON, Sofia Carolina (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: WP2 - Collider design

Contribution ID: 39

Type: **not specified**

Electron cloud build-up simulation studies for FCC-ee

Wednesday 7 December 2022 15:30 (30 minutes)

Presenter: SABATO, Luca (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: WP2 - Collider design

Contribution ID: 40

Type: **not specified**

Electron cloud simulations for the FCC-ee

Wednesday 7 December 2022 16:00 (30 minutes)

Presenter: YAMAN, Fatih (Izmir Institute of Technology (IYTE))

Session Classification: WP2 - Collider design

Contribution ID: 41

Type: **not specified**

Booster overview

Thursday 8 December 2022 09:00 (30 minutes)

Presenters: Dr CHANCE, Antoine (CEA Irfu); DALENA, Barbara (CEA-Irfu & Université Paris-Saclay (FR))

Session Classification: WP2 - Collider design

Contribution ID: 42

Type: **not specified**

Injection & Extraction

Thursday 8 December 2022 09:30 (30 minutes)

Presenter: HOFER, Michael (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 43

Type: **not specified**

Beam-beam & Impedance

Thursday 8 December 2022 10:00 (30 minutes)

Presenter: ZHANG, Yuan (IHEP-CAS)

Session Classification: WP2 - Collider design

Contribution ID: 44

Type: **not specified**

Vacuum status

Thursday 8 December 2022 11:00 (30 minutes)

Presenter: KERSEVAN, Roberto (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 45

Type: **not specified**

SR Background

Thursday 8 December 2022 11:30 (30 minutes)

Presenter: ANDRE, Kevin Daniel Joel (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 46

Type: **not specified**

EPOL Workshop summary

Thursday 8 December 2022 13:00 (30 minutes)

Presenter: KEINTZEL, Jacqueline (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 47

Type: **not specified**

Beam tests at SuperKEKB and PETRA IV

Thursday 8 December 2022 13:50 (20 minutes)

Presenter: KEINTZEL, Jacqueline (CERN)

Session Classification: WP2 - Collider design

Contribution ID: 48

Type: **not specified**

Possible Monochromatization test at DAFNE

Thursday 8 December 2022 14:10 (10 minutes)

Presenter: Dr FAUS-GOLFE, Angeles (IJClab IN2P3 CNRS-Université Paris-Saclay (FR))

Session Classification: WP2 - Collider design

Contribution ID: 49

Type: **not specified**

Arcs and Straight sections beam dynamics studies and optimization

Presenter: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 50

Type: **not specified**

Optics Matching with Arc Errors

Thursday 8 December 2022 14:20 (30 minutes)

Presenter: GARCIA, Cristobal (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: WP2 - Collider design

Contribution ID: 51

Type: **not specified**

Background and development of scenarios (Chapter 1)

Tuesday 6 December 2022 14:00 (1 hour)

Presenters: GUTLEBER, Johannes (CERN); LAIDOUNI, Patrycja (CERN); Mr BOILLON, Pierre (Cerema)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 52

Type: **not specified**

Presentation in the territory (Chapter 2)

Tuesday 6 December 2022 15:00 (1 hour)

Presenters: MALAN, Clotilde Gaëlle; GUTLEBER, Johannes (CERN); SAUVAIN, Maude

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 53

Type: **not specified**

Quick focus for each site (Chapters 3 to 10)

Tuesday 6 December 2022 16:00 (1 hour)

Presenters: MALAN, Clotilde Gaëlle; GUTLEBER, Johannes (CERN); SAUVAIN, Maude

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 54

Type: **not specified**

Orientations for the future (process)

Tuesday 6 December 2022 17:00 (1 hour)

Presenters: GUTLEBER, Johannes (CERN); LAIDOUNI, Patrycja (CERN); Mr BOILLON, Pierre (Cerema)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 55

Type: **not specified**

Final Focus design with local compensation of geometric and chromatic aberrations

Presenter: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 56

Type: **not specified**

Preliminary budget of alignment tolerances and time scales

Tuesday 6 December 2022 13:00 (30 minutes)

Presenter: RAUBENHEIMER, Tor (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 57

Type: **not specified**

Introduction

Wednesday 7 December 2022 13:30 (30 minutes)

Presenter: ULRICI, Luisa (CERN)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 58

Type: **not specified**

Status of the different chapters

Wednesday 7 December 2022 14:00 (30 minutes)

Presenter: D'ALOIA, LAETITA (CETU)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: 59

Type: **not specified**

Summary of the chapter 1- 2

Wednesday 7 December 2022 14:30 (30 minutes)

Presenters: ULRICI, Luisa (CERN); CHERREY, agnès (CETU)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: **60**

Type: **not specified**

Summary of the chapter 3

Wednesday 7 December 2022 15:00 (30 minutes)

Presenters: Mr BOILLON, Pierre (Cerema); CHERREY, agnès (CETU)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: **61**

Type: **not specified**

Basis for the cost analysis

Wednesday 7 December 2022 15:30 (30 minutes)

Presenter: ULRICI, Luisa (CERN)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: **62**

Type: **not specified**

Discussion

Wednesday 7 December 2022 16:00 (30 minutes)

Session Classification: WP3 - Integrate Europe [Closed session: attendance is by invitation only]

Contribution ID: **63**

Type: **not specified**

Arcs and Straight sections: beam dynamics studies and optimization

Wednesday 7 December 2022 16:30 (30 minutes)

Presenter: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 64

Type: **not specified**

Final Focus design with local compensation of geometric and chromatic aberrations

Wednesday 7 December 2022 17:00 (30 minutes)

Presenter: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 65

Type: **not specified**

Optic subsystems integration and general considerations

Wednesday 7 December 2022 17:30 (30 minutes)

Presenter: Dr RAIMONDI, Pantaleo (SLAC National Accelerator Laboratory (US))

Session Classification: WP2 - Collider design

Contribution ID: 67

Type: **not specified**

Beam tests at KIT/KARA

Thursday 8 December 2022 13:30 (20 minutes)

Presenter: HAERER, Bastian

Session Classification: WP2 - Collider design

Contribution ID: **68**

Type: **not specified**

Overleaf and Springer Nature publication activities

Tuesday 6 December 2022 15:30 (30 minutes)

Presenters: HAMMERSLEY, John; ARUNDELL, Katherine (Springer Nature)

Session Classification: WP5 - Leverage and Engage

Contribution ID: **69**

Type: **not specified**

Welcome and opening of FCCIS workshop

Monday 5 December 2022 09:30 (5 minutes)

Presenter: ZIMMERMANN, Frank (CERN)

Session Classification: Plenary session

Contribution ID: 70

Type: **not specified**

WP2 summary

Friday 9 December 2022 09:00 (1h 15m)

Presenters: ZIMMERMANN, Frank (CERN); AGAPOV, Ilya (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Summaries

Contribution ID: 71

Type: **not specified**

WP3 summary

Friday 9 December 2022 09:45 (10 minutes)

Presenter: GUTLEBER, Johannes (CERN)

Session Classification: Summaries

Contribution ID: 72

Type: **not specified**

WP4 summary

Friday 9 December 2022 09:50 (5 minutes)

Presenters: Dr SIRTORI, Emanuela (CSIL); CRESPO GARRIDO, Irene Del Rosario (Universidade de Santiago de Compostela (ES))

Session Classification: Summaries

Contribution ID: 73

Type: **not specified**

WP5 summary

Friday 9 December 2022 09:55 (5 minutes)

Session Classification: Summaries