

Other Science Opportunities at the FCC-ee



Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction and FCC-ee collider beam parameters

Thursday 28 November 2024 09:00 (15 minutes)

Presenter: ZIMMERMANN, Frank (CERN)

Session Classification: FCC accelerator capabilities

Contribution ID: 2

Type: **not specified**

Booster parameters for light source applications

Presenter: CHANCE, Antoine (CEA Irfu)

Session Classification: FCC accelerator capabilities

Contribution ID: 3

Type: **not specified**

High-energy photons from the FCC-ee complex

Thursday 28 November 2024 10:00 (20 minutes)

Presenter: Dr CASALBUONI, Sara (European XFEL)

Session Classification: Photon science and extreme photon science | Part 1

Contribution ID: 4

Type: **not specified**

Science with photons at 10s of GeV

Thursday 28 November 2024 10:35 (10 minutes)

Presenter: ZIMMERMANN, Frank (CERN)

Session Classification: Photon science and extreme photon science | Part 1

Contribution ID: 5

Type: **not specified**

Linac e+ beam with crystalline undulator(s)

Thursday 28 November 2024 11:30 (10 minutes)

Presenters: Dr NEGRELLO, Riccardo (INFN Ferrara section); NEGRELLO, Riccardo (Universita e INFN, Ferrara (IT))

Session Classification: Photon science and extreme photon science | Part 2

Contribution ID: 6

Type: **not specified**

Laser Compton scattering in the collider

Thursday 28 November 2024 10:45 (15 minutes)

Presenters: DREBOT, Illya; DREBOT, Illya

Session Classification: Photon science and extreme photon science | Part 1

Contribution ID: 7

Type: **not specified**

Pre-Injector capabilities

Thursday 28 November 2024 09:15 (15 minutes)

Presenters: BARTOSIK, Hannes (CERN); PAPAPHILIPPOU, Yannis (CERN)

Session Classification: FCC accelerator capabilities

Contribution ID: 8

Type: **not specified**

Booster capabilities including for light source applications

Thursday 28 November 2024 09:30 (20 minutes)

Presenter: CHANCE, Antoine (CEA Irfu)

Session Classification: FCC accelerator capabilities

Contribution ID: **10**

Type: **not specified**

Dark matter searches

Thursday 28 November 2024 14:00 (20 minutes)

Presenter: CRIVELLI, Paolo (ETH Zurich (CH))

Session Classification: Physics Beyond Colliders, HEP applications

Contribution ID: 11

Type: **not specified**

Strong-Field QED with Electron-Laser Interactions and New Physics Searches with Photons

Thursday 28 November 2024 14:20 (20 minutes)

Presenter: SCHULTHESS, Ivo (Deutsches Elektronen-Synchrotron DESY)

Session Classification: Physics Beyond Colliders, HEP applications

Contribution ID: 12

Type: **not specified**

Strong field QED in crystals

Thursday 28 November 2024 14:40 (20 minutes)

Presenter: BANDIERA, Laura (Universita e INFN, Ferrara (IT))

Session Classification: Physics Beyond Colliders, HEP applications

Contribution ID: 13

Type: **not specified**

Imaging opportunities at 50-100 keV

Thursday 28 November 2024 10:20 (15 minutes)

Presenter: STAMPANONI, Marco

Session Classification: Photon science and extreme photon science | Part 1

Contribution ID: 14

Type: **not specified**

Photons from coherent bremsstrahlung

Thursday 28 November 2024 11:40 (10 minutes)

Presenter: APYAN, Armen

Session Classification: Photon science and extreme photon science | Part 2

Contribution ID: 15

Type: **not specified**

Discussion

Thursday 28 November 2024 11:50 (35 minutes)

Session Classification: Photon science and extreme photon science | Part 2

Contribution ID: 16

Type: **not specified**

Full Inverse Compton Scattering and Unruh photons

Thursday 28 November 2024 15:00 (20 minutes)

Presenter: SERAFINI, Luca

Session Classification: Physics Beyond Colliders, HEP applications

Contribution ID: 17

Type: **not specified**

Introduction

Friday 29 November 2024 09:00 (10 minutes)

Presenter: Dr CALVIANI, Marco (CERN)

Session Classification: Multipurpose applications of the e-/e+beams and beamstrahlung photons

Contribution ID: 18

Type: **not specified**

Preliminary Assessment of the Radionuclide Production Possibilities at the FCCee

Friday 29 November 2024 09:30 (30 minutes)

Presenter: DUCHEMIN, Charlotte (CERN SY/STI/RBS)

Session Classification: Multipurpose applications of the e-/e+beams and beamstrahlung photons

Contribution ID: 19

Type: **not specified**

Science opportunities with beamstrahlung radiation

Session Classification: Multipurpose applications of the e-/e+beams and beamstrahlung photons

Contribution ID: 20

Type: **not specified**

A neutron source at FCC-ee?

Friday 29 November 2024 10:00 (30 minutes)

Presenter: GUNSING, Frank (Université Paris-Saclay (FR))

Session Classification: Multipurpose applications of the e-/e+beams and beamstrahlung photons

Contribution ID: 21

Type: **not specified**

Ultimate limit on beam brightness

Thursday 28 November 2024 09:50 (10 minutes)

Presenter: ANTIPOV, Sergey (DESY)

Session Classification: FCC accelerator capabilities

Contribution ID: 22

Type: **not specified**

Overview of slow positron beam facilities

Thursday 28 November 2024 15:50 (20 minutes)

Presenter: RIENACKER, Benjamin (University of Liverpool (GB))

Session Classification: Positron applications

Contribution ID: 23

Type: **not specified**

Material sciences with high-brightness, low energy positron beams

Thursday 28 November 2024 16:10 (20 minutes)

Presenter: Dr DICKMANN, Marcel (UniBW Germany)

Session Classification: Positron applications

Contribution ID: 24

Type: **not specified**

New experiments with dense positron clouds

Thursday 28 November 2024 16:30 (20 minutes)

muon-antimuon pair production by laser driven electron-positron recollision
positron and positronium binding atoms (for example PsCl)

Presenter: CAMPER, Antoine (University of Oslo (NO))

Session Classification: Positron applications

Contribution ID: 25

Type: **not specified**

Beamstrahlung radiation properties

Friday 29 November 2024 09:10 (20 minutes)

Presenter: FRASCA, Alessandro (University of Liverpool (GB))

Session Classification: Multipurpose applications of the e-/e+beams and beamstrahlung photons