

Gamma Factory meeting - CERN

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome - Overview of the Gamma Factory Study initiative -Yellow report: where do we stand

Monday 25 March 2019 09:00 (45 minutes)

Presenter: KRASNY, Mieczyslaw (Universite Sorbonne Nouvelle Paris III (FR))

Session Classification: PSI beams

Contribution ID: 2

Type: **not specified**

Acceleration and storage of ion beams at CERN.

Monday 25 March 2019 09:45 (25 minutes)

Presenter: ALEMANY FERNANDEZ, Reyes (CERN)

Session Classification: PSI beams

Contribution ID: 3

Type: **not specified**

Ion sources - present status.

Monday 25 March 2019 10:40 (30 minutes)

Presenter: SCRIVENS, Richard (CERN)

Session Classification: PSI beams

Contribution ID: 5

Type: **not specified**

SPS and LHC vacuum.

Monday 25 March 2019 11:10 (50 minutes)

Presenter: KERSEVAN, Roberto (CERN)

Session Classification: PSI beams

Contribution ID: 7

Type: **not specified**

Collimation of PSI beams.

Monday 25 March 2019 14:00 (25 minutes)

Presenter: Dr GORZAWSKI, Arkadiusz (University of Malta (MT))

Session Classification: PSI beams, cont

Contribution ID: 8

Type: **not specified**

Optimisation of the stripper foil material and thickness for GF.

Monday 25 March 2019 14:25 (25 minutes)

Presenter: KROEGER, Felix

Session Classification: PSI beams, cont

Contribution ID: 9

Type: **not specified**

PSI operation constraints: Run 3 and Run 4.

Monday 25 March 2019 14:50 (25 minutes)

Presenter: ALEMANY FERNANDEZ, Reyes (CERN)

Session Classification: PSI beams, cont

Contribution ID: 13

Type: **not specified**

Beam gas collisions.

Monday 25 March 2019 15:15 (25 minutes)

Presenter: SHEVELKO, Viatcheslav

Session Classification: Stability aspects of PSI beams

Contribution ID: 15

Type: **not specified**

Stark effect.

Monday 25 March 2019 15:40 (10 minutes)

Presenter: KRASNY, Mieczyslaw (Universite Sorbonne Nouvelle Paris III (FR))

Session Classification: Stability aspects of PSI beams

Contribution ID: 16

Type: **not specified**

Xe+39, Pb+80 and Pb+81 tests in SPS

Monday 25 March 2019 16:20 (20 minutes)

Presenter: HIRLANDER, Simon (CERN)

Session Classification: SPS and LHC beam test results

Contribution ID: 17

Type: **not specified**

Pb81+ tests in LHC.

Monday 25 March 2019 16:40 (35 minutes)

Presenter: SCHAUMANN, Michaela (CERN)

Session Classification: SPS and LHC beam test results

Contribution ID: **18**

Type: **not specified**

Overview of the gamma-ray sources.

Tuesday 26 March 2019 14:00 (35 minutes)

Presenter: SERAFINI, Luca (INFN-Milan)

Session Classification: Gamma Ray source

Contribution ID: **19**

Type: **not specified**

PSI driven gamma source —fundamentals.

Tuesday 26 March 2019 18:00 (30 minutes)

Presenter: BUDKER, Dmitry (Mainz University)

Session Classification: Software tools development

Contribution ID: 20

Type: **not specified**

Spatiotemporal and spectral optimisation of the Laser+F-P photon fluxes

Tuesday 26 March 2019 15:10 (30 minutes)

Presenter: MARTENS, Aurelien (Centre National de la Recherche Scientifique (FR))

Session Classification: Gamma Ray source

Contribution ID: 21

Type: **not specified**

Spatiotemporal and spectral optimisation of FEL photon fluxes.

Tuesday 26 March 2019 16:30 (30 minutes)

Presenter: PETRILLO, Vittoria

Session Classification: Gamma Ray source

Contribution ID: 22

Type: **not specified**

Overview and plans

Tuesday 26 March 2019 17:30 (30 minutes)

Presenter: PETRENKO, Alexey (Budker Institute of Nuclear Physics (RU))

Session Classification: Software tools development

Contribution ID: 23

Type: **not specified**

Atomic Physics aspects of the GF software.

Tuesday 26 March 2019 14:35 (35 minutes)

Presenter: ROCHESTER, Simon

Session Classification: Gamma Ray source

Contribution ID: 24

Type: **not specified**

Gamma Factory ion beam dynamics

Tuesday 26 March 2019 15:40 (20 minutes)

Presenter: PETRENKO, Alexey (Budker Institute of Nuclear Physics (RU))

Session Classification: Gamma Ray source

Contribution ID: 25

Type: **not specified**

GF-Cain.

Wednesday 27 March 2019 09:50 (25 minutes)

Presenter: PLACZEK, Wiesiek (Jagiellonian University)

Session Classification: Software tools development, cont.

Contribution ID: 26

Type: **not specified**

GF-CMCC.

Wednesday 27 March 2019 09:25 (25 minutes)

Presenters: CURATOLO, Camilla (Universita e INFN, Padova (IT)); CURATOLO, Camilla (INFN - National Institute for Nuclear Physics)

Session Classification: Software tools development, cont.

Contribution ID: 27

Type: **not specified**

Semi-Analytical calculations.

Wednesday 27 March 2019 09:00 (25 minutes)

Presenter: MARTENS, Aurelien (Centre National de la Recherche Scientifique (FR))

Session Classification: Software tools development, cont.

Contribution ID: 28

Type: **not specified**

RH code for photon-PSI collisions.

Wednesday 27 March 2019 10:45 (20 minutes)

Presenter: NEVAY, Laurie (Royal Holloway University of London)

Session Classification: Software tools development, cont.

Contribution ID: 29

Type: **not specified**

Muon pair production Monte Carlo.

Wednesday 27 March 2019 11:05 (30 minutes)

Presenter: IVANTCHENKO, Vladimir (CERN)

Session Classification: Software tools development, cont.

Contribution ID: 30

Type: **not specified**

Discussion on the way forward in the GF software development

Wednesday 27 March 2019 11:35 (25 minutes)

Presenter: PETRENKO, Alexey (Budker Institute of Nuclear Physics (RU))

Session Classification: Software tools development, cont.

Contribution ID: **31**

Type: **not specified**

Overall concept, stages and procedure.

Wednesday 27 March 2019 14:00 (40 minutes)

Presenter: GODDARD, Brennan (CERN)

Session Classification: PoP expriment

Contribution ID: 32

Type: **not specified**

SPS accelerator aspects.

Wednesday 27 March 2019 14:40 (20 minutes)

Presenter: DUTHEIL, Yann (CERN)

Session Classification: PoP experiment

Contribution ID: 33

Type: **not specified**

Ion transition parameters and their present uncertainties.

Wednesday 27 March 2019 15:00 (20 minutes)

Presenter: SURZHYKOV, Andrey

Session Classification: PoP experiment

Contribution ID: 34

Type: **not specified**

Photon flux simulations.

Wednesday 27 March 2019 15:20 (20 minutes)

Presenters: CURATOLO, Camilla (Universita e INFN, Padova (IT)); CURATOLO, Camilla (INFN - National Institute for Nuclear Physics)

Session Classification: PoP experiment

Contribution ID: 35

Type: **not specified**

Bunch dynamic.

Wednesday 27 March 2019 17:10 (30 minutes)

Presenter: PETRENKO, Alexey (Budker Institute of Nuclear Physics (RU))

Session Classification: PoP experiment

Contribution ID: 36

Type: **not specified**

Laser system for single bunch, “photon production” option.

Thursday 28 March 2019 09:40 (20 minutes)

Presenter: GIBSON, Stephen (Royal Holloway, University of London)

Session Classification: PoP experiment, cont.

Contribution ID: 37

Type: **not specified**

Impedance guidelines for the SPS

Wednesday 27 March 2019 16:10 (1 hour)

Presenter: FARRICKER, Aaron (CERN)

Session Classification: PoP experiment

Contribution ID: **38**

Type: **not specified**

Laser system(s) for single bunch and bunch train (cavity) “cooling proof” options.

Thursday 28 March 2019 09:00 (40 minutes)

Presenters: Dr CASSOU, Kevin (LAL/CNRS); CASSOU, Kevin (Centre National de la Recherche Scientifique (FR))

Session Classification: PoP experiment, cont.

Contribution ID: **39**

Type: **not specified**

Radiation aspects.

Thursday 28 March 2019 10:00 (40 minutes)

Presenter: GARCIA ALIA, Ruben (CERN)

Session Classification: PoP experiment, cont.

Contribution ID: 40

Type: **not specified**

Photon detection system(s) - photon production and beam cooling observation functions.

Thursday 28 March 2019 11:50 (40 minutes)

Presenter: LEFEVRE, Thibaut (CERN)

Session Classification: PoP experiment, cont.

Contribution ID: 41

Type: **not specified**

SPS-RF - Timing and synchronization.

Thursday 28 March 2019 11:10 (40 minutes)

Presenter: HOFLE, Wolfgang (CERN)

Session Classification: PoP experiment, cont.

Contribution ID: 46

Type: **not specified**

Experiment Layout and schedule

Thursday 28 March 2019 12:30 (30 minutes)

Presenter: GODDARD, Brennan (CERN)

Session Classification: PoP experiment, cont.