

23rd Geant4 Collaboration Meeting

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome by Mr. Holger Radner, vice Mayor of Lund

Monday, 27 August 2018 09:00 (10 minutes)

Presenter: Mr RADNER, Holger (Vice Mayor, Lund)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 2

Type: **not specified**

Opening remarks

Monday, 27 August 2018 09:10 (5 minutes)

Presenters: ASAI, Makoto (SLAC National Accelerator Laboratory (US)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 3

Type: **not specified**

Open requirements - LHC and other HEP energy frontier experiments

Monday, 27 August 2018 09:15 (15 minutes)

Presenter: NOVAK, Mihaly (CERN)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 4

Type: **not specified**

Open requirements - HEP intensity and cosmic frontier experiments

Monday, 27 August 2018 09:30 (15 minutes)

Presenter: GENSER, Krzysztof (Fermi National Accelerator Laboratory (US))

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 5

Type: **not specified**

Open requirements - Nuclear physics and engineering, material science

Monday, 27 August 2018 09:45 (15 minutes)

Presenter: WRIGHT, Dennis Herbert

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 6

Type: **not specified**

Open requirements - Space science and engineering

Monday, 27 August 2018 10:00 (15 minutes)

Presenter: SANTIN, Giovanni (ESA)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 7

Type: **not specified**

Open requirements - Medical and bio science

Monday, 27 August 2018 10:15 (15 minutes)

Presenter: ARCE, Pedro (CIEMAT)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 8

Type: **not specified**

Report on Parallel Session 1A and 2A

Friday, 31 August 2018 11:00 (15 minutes)

Report from EM physics parallel sessions

Presenters: IVANTCHENKO, Vladimir (CERN); INCERTI, Sebastien (CNRS/IN2P3); NOVAK, Mihaly (CERN); PANDOLA, Luciano (INFN-LNS)

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 9

Type: **not specified**

Report on Parallel Session 1B

Friday, 31 August 2018 11:15 (8 minutes)

Presenters: JUN, Soon Yung (Fermi National Accelerator Lab. (US)); FOLGER, Gunter (CERN)

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: **10**

Type: **not specified**

Report on Parallel Session 2B

Friday, 31 August 2018 11:23 (8 minutes)

Presenters: HOWARD, Alexander (Imperial College (GB)); GARNIER, Laurent

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 11

Type: **not specified**

Report on Parallel Session 3B

Friday, 31 August 2018 11:31 (8 minutes)

Presenters: ASAI, Makoto (SLAC National Accelerator Laboratory (US)); COSMO, Gabriele (CERN)

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 12

Type: **not specified**

Report on Parallel Session 4B

Friday, 31 August 2018 11:39 (8 minutes)

Presenters: COSMO, Gabriele (CERN); APOSTOLAKIS, John (CERN)

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 13

Type: **not specified**

Report on Parallel Session 5B

Friday, 31 August 2018 11:47 (8 minutes)

Presenters: VERDERI, Marc (Centre National de la Recherche Scientifique (FR)); HOWARD, Alexander (Imperial College (GB))

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 14

Type: **not specified**

Report on Parallel Session 6A

Friday, 31 August 2018 11:55 (8 minutes)

Presenters: FOLGER, Gunter (CERN); WENZEL, Hans-Joachim (Fermi National Accelerator Lab. (US))

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 15

Type: **not specified**

Report on Parallel Session 6B

Friday, 31 August 2018 12:03 (8 minutes)

Presenters: HRIVNACOVA, Ivana (Centre National de la Recherche Scientifique (FR)); GUATELLI, Susanna

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 16

Type: **not specified**

Report on Parallel Session 7B

Friday, 31 August 2018 12:11 (8 minutes)

Presenters: MORGAN, Benjamin (University of Warwick (GB)); FOLGER, Gunter (CERN)

Session Classification: Plenary 8 - Summary of parallel sessions

Contribution ID: 17

Type: **not specified**

Report on Parallel Session 3A, 4A, 5A and 8A

Friday, 31 August 2018 14:00 (20 minutes)

Reports on hadronic physics parallel sessions

Presenters: WRIGHT, Dennis Herbert; YARBA, Julia; GENSER, Krzysztof (Fermi National Accelerator Laboratory (US)); FOLGER, Gunter (CERN)

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: **18**

Type: **not specified**

Report on Parallel Session 7A

Friday, 31 August 2018 14:20 (15 minutes)

Presenters: VERDERI, Marc (Centre National de la Recherche Scientifique (FR)); POKORSKI, Witold (CERN)

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: **19**

Type: **not specified**

Report on Parallel Session 8B

Friday, 31 August 2018 14:35 (8 minutes)

Presenters: ALLISON, John; GARNIER, Laurent

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: **20**

Type: **not specified**

Release schedule

Friday, 31 August 2018 14:43 (15 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: 21

Type: **not specified**

Next collaboration meeting

Friday, 31 August 2018 14:58 (5 minutes)

Presenter: GUEYE, Paul (Hampton University)

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: 22

Type: **not specified**

Closing remarks

Friday, 31 August 2018 15:03 (15 minutes)

Presenters: ASAI, Makoto (SLAC National Accelerator Laboratory (US)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 9 - Summary of parallel sessions / closing session

Contribution ID: 23

Type: **not specified**

New 5D gamma conversion model

Monday, 27 August 2018 14:00 (20 minutes)

Presenters: BERNARD, Denis Robert Leon (Centre National de la Recherche Scientifique (FR)); SEMENIOUK, Igor (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 1A - New EM physics models

Contribution ID: 24

Type: **not specified**

New model of 3 gamma annihilation

Monday, 27 August 2018 14:20 (20 minutes)

Presenter: ALKIN, Andrei (M.V. Lomonosov Moscow State University (RU))

Session Classification: Parallel 1A - New EM physics models

Contribution ID: 25

Type: **not specified**

Models for simulation of Gold nanoparticles

Monday, 27 August 2018 14:40 (20 minutes)

Presenter: SAKATA, Dosatsu (University of Tsukuba (JP))

Session Classification: Parallel 1A - New EM physics models

Contribution ID: 26

Type: **not specified**

New PIXE cross sections and validation of Auger electrons

Monday, 27 August 2018 15:00 (20 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Parallel 1A - New EM physics models

Contribution ID: 27

Type: **not specified**

Update of Standard EM Models

Tuesday, 28 August 2018 09:00 (30 minutes)

Presenter: NOVAK, Mihaly (CERN)

Session Classification: Plenary 3 - Electromagnetic Physics Updates

Contribution ID: 28

Type: **not specified**

Status of Standard EM libraries

Tuesday, 28 August 2018 09:30 (30 minutes)

Presenter: IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary 3 - Electromagnetic Physics Updates

Contribution ID: 29

Type: **not specified**

Status of Low-energy EM Physics

Tuesday, 28 August 2018 10:00 (30 minutes)

Presenter: INCERTI, Sebastien (CNRS/IN2P3)

Session Classification: Plenary 3 - Electromagnetic Physics Updates

Contribution ID: **30**

Type: **not specified**

CPA100 models for Geant4-DNA

Monday, 27 August 2018 16:40 (20 minutes)

Presenter: BORDAGE, M. C.

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 31

Type: **not specified**

Geant4 low-energy models for electron transport in liquid water

Monday, 27 August 2018 16:00 (20 minutes)

Presenter: KYRIAKOU, I.

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 32

Type: **not specified**

New low energy elastic model for gammas

Monday, 27 August 2018 16:20 (20 minutes)

Presenter: OMER, M.

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 33

Type: **not specified**

Validation of the Geant4 EM physics for modelling high energy synchrotron beamlines

Monday, 27 August 2018 17:00 (20 minutes)

Presenter: GUATELLI, S.

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 34

Type: **not specified**

Validation of Geant4 fragmentation models between 4He and 20Ne

Presenter: BOLST, D.

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 35

Type: **not specified**

High Energy Hadronic Models: Status and Plans - Gunter Folger

Tuesday, 28 August 2018 11:00 (20 minutes)

Session Classification: Plenary 4 - Physics updates 2

Contribution ID: 36

Type: **not specified**

Low Energy Hadronic Models: Status and Plans - Laurent Desorgher

Tuesday, 28 August 2018 11:20 (20 minutes)

Session Classification: Plenary 4 - Physics updates 2

Contribution ID: 37

Type: **not specified**

Hadronic Validation: Status and Plans - Dennis Wright

Tuesday, 28 August 2018 11:40 (20 minutes)

Session Classification: Plenary 4 - Physics updates 2

Contribution ID: **38**

Type: **not specified**

Hadronic Model Discussion

Tuesday, 28 August 2018 12:00 (30 minutes)

Session Classification: Plenary 4 - Physics updates 2

Contribution ID: 39

Type: **not specified**

Very High Energy Models - Khaled Abdellatif

Tuesday, 28 August 2018 14:00 (15 minutes)

Session Classification: Parallel 3A - Status of development and validation of hadronic physics models, part I

Contribution ID: 40

Type: **not specified**

FTF and QGS Models: Status and Plans - Gunter Folger

Tuesday, 28 August 2018 14:15 (15 minutes)

Session Classification: Parallel 3A - Status of development and validation of hadronic physics models, part I

Contribution ID: 41

Type: **not specified**

INCL++ Status and Plans - Jean-Christophe David

Tuesday, 28 August 2018 14:30 (15 minutes)

Session Classification: Parallel 3A - Status of development and validation of hadronic physics models, part I

Contribution ID: 42

Type: **not specified**

Bertini Cascade Staus and Plans - Dennis Wright

Tuesday, 28 August 2018 14:45 (15 minutes)

Session Classification: Parallel 3A - Status of development and validation of hadronic physics models, part I

Contribution ID: 43

Type: **not specified**

Discussion

Tuesday, 28 August 2018 15:00 (30 minutes)

Session Classification: Parallel 3A - Status of development and validation of hadronic physics models, part I

Contribution ID: 44

Type: **not specified**

Results from CMS Test Beam and Run 2 - S. Banerjee, V. Ivantchenko

Tuesday, 28 August 2018 16:00 (15 minutes)

Presenters: BANERJEE, Sunanda (Fermi National Accelerator Lab. (US)); IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel 4A - Status of development and validation of hadronic physics models, part II

Contribution ID: 45

Type: **not specified**

INCL++ Parameter Study - Jean-Christophe David

Tuesday, 28 August 2018 16:15 (15 minutes)

Presenter: DAVID, Jean-Christophe

Session Classification: Parallel 4A - Status of development and validation of hadronic physics models, part II

Contribution ID: 46

Type: **not specified**

FTF Configuration Interface - Julia Yarba

Tuesday, 28 August 2018 16:30 (15 minutes)

Presenters: YARBA, Julia (Fermi National Accelerator Lab. (US)); YARBA, Julia

Session Classification: Parallel 4A - Status of development and validation of hadronic physics models, part II

Contribution ID: 47

Type: **not specified**

FTF + Bertini Parameter Study - Robert Hatcher

Tuesday, 28 August 2018 16:45 (30 minutes)

Presenter: HATCHER, Robert William (Fermilab)

Session Classification: Parallel 4A - Status of development and validation of hadronic physics models, part II

Contribution ID: 48

Type: **not specified**

Discussion

Tuesday, 28 August 2018 17:15 (15 minutes)

Session Classification: Parallel 4A - Status of development and validation of hadronic physics models, part II

Contribution ID: 49

Type: **not specified**

Hadron Therapy Validation - Susanna Guatelli

Wednesday, 29 August 2018 09:00 (15 minutes)

Session Classification: Parallel 5A - Low energy hadronic physics

Contribution ID: 50

Type: **not specified**

High Precision Hadron Models: Status and Plans - Pedro Arce

Wednesday, 29 August 2018 09:15 (15 minutes)

Session Classification: Parallel 5A - Low energy hadronic physics

Contribution ID: 51

Type: **not specified**

Radioactive Decay Model: Status and Plans - Laurent Desorgher

Wednesday, 29 August 2018 09:30 (15 minutes)

Session Classification: Parallel 5A - Low energy hadronic physics

Contribution ID: 52

Type: **not specified**

Precompound and Deexcitation Models - Vladimir Ivantchenko

Wednesday, 29 August 2018 09:45 (15 minutes)

Session Classification: Parallel 5A - Low energy hadronic physics

Contribution ID: 53

Type: **not specified**

Discussion

Wednesday, 29 August 2018 10:00 (30 minutes)

Session Classification: Parallel 5A - Low energy hadronic physics

Contribution ID: 54

Type: **not specified**

ProtonHP: Status and Problems - Pablo Cirrone

Friday, 31 August 2018 09:00 (10 minutes)

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: 55

Type: **not specified**

Discussion of ParticleHP Maintenance - Michel Maire

Friday, 31 August 2018 09:10 (20 minutes)

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: 56

Type: **not specified**

(Extension of 7A) - Vectorisation of RND engines

Friday, 31 August 2018 09:30 (15 minutes)

Primary authors: APOSTOLAKIS, John (CERN); JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Presenters: APOSTOLAKIS, John (CERN); JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: 57

Type: **not specified**

Discussion - Witold Pokorski

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: 58

Type: **not specified**

(Extension of 7A) - Discussion

Friday, 31 August 2018 09:55 (35 minutes)

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: 59

Type: **not specified**

Updates on solids modelling in VecGeom

Tuesday, 28 August 2018 16:00 (20 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Parallel 4B - Geometry working session

Contribution ID: **60**

Type: **not specified**

Latest developments in navigation with VecGeom

Tuesday, 28 August 2018 16:20 (20 minutes)

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: Parallel 4B - Geometry working session

Contribution ID: **61**

Type: **not specified**

Investigations in the ATLAS geometry

Tuesday, 28 August 2018 16:40 (20 minutes)

Presenter: TCHERNIAEV, Evgueni (Russian Academy of Sciences (RU))

Session Classification: Parallel 4B - Geometry working session

Contribution ID: **62**

Type: **not specified**

Updated field thresholds for looping particles

Tuesday, 28 August 2018 17:00 (20 minutes)

Presenter: APOSTOLAKIS, John (CERN)

Session Classification: Parallel 4B - Geometry working session

Contribution ID: **63**

Type: **not specified**

Review of open issues and discussion

Tuesday, 28 August 2018 17:20 (10 minutes)

Session Classification: Parallel 4B - Geometry working session

Contribution ID: **64**

Type: **not specified**

Introduction

Wednesday, 29 August 2018 09:00 (10 minutes)

Primary authors: HOWARD, Alexander (Imperial College (GB)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Presenters: HOWARD, Alexander (Imperial College (GB)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 5B - Biasing

Contribution ID: 65

Type: **not specified**

Variance reduction using multi-stage simulations

Wednesday, 29 August 2018 09:10 (20 minutes)

Primary author: TRUSCOTT, Pete

Presenter: TRUSCOTT, Pete

Session Classification: Parallel 5B - Biasing

Contribution ID: **66**

Type: **not specified**

Update on Channeling

Wednesday, 29 August 2018 09:30 (15 minutes)

Primary author: BAGLI, Enrico (Universita e INFN, Ferrara (IT))

Presenter: BAGLI, Enrico (Universita e INFN, Ferrara (IT))

Session Classification: Parallel 5B - Biasing

Contribution ID: 67

Type: **not specified**

Update on Generic Biasing

Wednesday, 29 August 2018 09:45 (15 minutes)

Primary author: VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

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

Session Classification: Parallel 5B - Biasing

Contribution ID: **68**

Type: **not specified**

Discussion on open issues

Wednesday, 29 August 2018 10:10 (20 minutes)

Session Classification: Parallel 5B - Biasing

Contribution ID: 69

Type: **not specified**

Having a Differential Cross-Section Class

Wednesday, 29 August 2018 10:00 (10 minutes)

Primary author: VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

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

Session Classification: Parallel 5B - Biasing

Contribution ID: 70

Type: **not specified**

Migration to C++11/14/17

Thursday, 30 August 2018 11:00 (30 minutes)

Presenter: MORGAN, Benjamin (University of Warwick (GB))

Session Classification: Plenary 7 - Code evolution strategies

Contribution ID: 71

Type: **not specified**

Integrating R&D outcomes

Thursday, 30 August 2018 11:30 (30 minutes)

Presenter: ASAI, Makoto (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary 7 - Code evolution strategies

Contribution ID: 72

Type: **not specified**

Git openness

Thursday, 30 August 2018 12:00 (30 minutes)

Presenters: COSMO, Gabriele (CERN); MATO VILA, Pere (CERN)

Session Classification: Plenary 7 - Code evolution strategies

Contribution ID: 73

Type: **not specified**

Profiling for low energy physics

Monday, 27 August 2018 14:00 (15 minutes)

Presenter: CHO, Kihyeon

Session Classification: Parallel 1B - Computing performance

Contribution ID: 74

Type: **not specified**

Medcial Domain

Monday, 27 August 2018 14:15 (15 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Parallel 1B - Computing performance

Contribution ID: 75

Type: **not specified**

ALICE

Monday, 27 August 2018 14:30 (15 minutes)

Presenter: HRIVNACOVA, Ivana (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 1B - Computing performance

Contribution ID: 76

Type: **not specified**

ATLAS

Monday, 27 August 2018 14:45 (15 minutes)

Presenter: APOSTOLAKIS, John (CERN)

Session Classification: Parallel 1B - Computing performance

Contribution ID: 77

Type: **not specified**

CMS

Monday, 27 August 2018 15:00 (15 minutes)

Presenter: ELVIRA, Victor Daniel (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 1B - Computing performance

Contribution ID: 78

Type: **not specified**

Intensity Frontier

Monday, 27 August 2018 15:15 (15 minutes)

Presenters: GENSER, Krzysztof (Fermi National Accelerator Laboratory (US)); JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 1B - Computing performance

Contribution ID: 79

Type: **not specified**

Sub-event parallelism

Tuesday, 28 August 2018 14:00 (12 minutes)

Presenter: ASAI, Makoto (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: 80

Type: **not specified**

Unified tracking mechanism for exotic particles (ions, muonic atoms, radicals, hyper-nuclear, phonon, e/h)

Tuesday, 28 August 2018 14:12 (12 minutes)

Presenters: ASAI, Makoto (SLAC National Accelerator Laboratory (US)); KURASHIGE, Hisaya (Kobe University (JP))

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **81**

Type: **not specified**

Revisit / retreat production thresholds and physics process framework

Tuesday, 28 August 2018 14:24 (12 minutes)

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

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **82**

Type: **not specified**

Refactoring transportation

Tuesday, 28 August 2018 14:36 (12 minutes)

Presenters: ASAI, Makoto (SLAC National Accelerator Laboratory (US)); COSMO, Gabriele (CERN)

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **83**

Type: **not specified**

Use of HPC

Tuesday, 28 August 2018 14:48 (12 minutes)

Presenter: MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **84**

Type: **not specified**

Extending crystal structure capabilities

Tuesday, 28 August 2018 15:00 (12 minutes)

Presenter: BAGLI, Enrico (Universita e INFN, Ferrara (IT))

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **85**

Type: **not specified**

Open discussion

Tuesday, 28 August 2018 15:24 (6 minutes)

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: **86**

Type: **not specified**

Current status of the Geant4 Advanced Examples

Thursday, 30 August 2018 14:00 (15 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: 87

Type: **not specified**

Hadrontherapy: status, recent updates, and new developments

Thursday, 30 August 2018 14:15 (15 minutes)

Presenter: PETRINGA, G.

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: **88**

Type: **not specified**

VIS, UI clean-up

Thursday, 30 August 2018 14:45 (10 minutes)

Presenter: ALLISON, John

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: **89**

Type: **not specified**

New extended/physicslists category

Thursday, 30 August 2018 15:00 (5 minutes)

Presenter: HRIVNACOVA, Ivana (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: **90**

Type: **not specified**

New extensibleFactory example

Thursday, 30 August 2018 15:05 (5 minutes)

Presenter: HATCHER, Robert William (Fermilab)

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: **91**

Type: **not specified**

New OpNovice2 example

Thursday, 30 August 2018 14:55 (5 minutes)

Presenter: SAWKEY, Daren

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: 92

Type: **not specified**

DICOM2 + Proposal for new demonstration of using statistic tools

Thursday, 30 August 2018 15:10 (15 minutes)

Presenter: MADSEN, Jonathan (Lawerence Berkeley National Laboratory)

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: 93

Type: **not specified**

B&E Examples WG: Work plan items

Thursday, 30 August 2018 14:30 (15 minutes)

Presenter: HRIVNACOVA, Ivana (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 6B - Basic, Extended and Advanced Examples

Contribution ID: 94

Type: **not specified**

Geant4 val

Thursday, 30 August 2018 14:20 (20 minutes)

Presenter: KONSTANTINOV, Dmitri (Institute for High Energy Physics of NRC Kurchatov Institute (R))

Session Classification: Parallel 6A - Open topics in physics lists and validation tools

Contribution ID: 95

Type: **not specified**

DoSSiER

Thursday, 30 August 2018 14:40 (20 minutes)

Presenter: WENZEL, Hans-Joachim (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 6A - Open topics in physics lists and validation tools

Contribution ID: 96

Type: **not specified**

Physics List Factory - an Update

Thursday, 30 August 2018 14:00 (20 minutes)

Presenter: HATCHER, Robert William (Fermilab)

Session Classification: Parallel 6A - Open topics in physics lists and validation tools

Contribution ID: 97

Type: **not specified**

Biasing in Geant4 - an Update

Wednesday, 29 August 2018 11:00 (20 minutes)

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

Session Classification: Plenary 5 - Generic process, physics validation and validation tools

Contribution ID: **98**

Type: **not specified**

Validation Strategies and Tools

Wednesday, 29 August 2018 11:20 (20 minutes)

Presenter: FOLGER, Gunter (CERN)

Session Classification: Plenary 5 - Generic process, physics validation and validation tools

Contribution ID: **99**

Type: **not specified**

Discussion

Wednesday, 29 August 2018 11:40 (20 minutes)

Session Classification: Plenary 5 - Generic process, physics validation and validation tools

Contribution ID: **100**

Type: **not specified**

Documentation update

Monday, 27 August 2018 16:00 (20 minutes)

update on the current status of the Geant4 documentation and request for inputs for future features.

Presenter: HOWARD, Alexander (Imperial College (GB))

Session Classification: Parallel 2B - Documentation working session

Contribution ID: **101**

Type: **not specified**

Documentation Discussion 1

Monday, 27 August 2018 16:20 (10 minutes)

- release schedule and location of development documents (for public access?)
- What about beta releases?

Presenter: HOWARD, Alexander (Imperial College (GB))

Session Classification: Parallel 2B - Documentation working session

Contribution ID: **102**

Type: **not specified**

Documentation Discussion 2

Monday, 27 August 2018 16:30 (15 minutes)

- Alternative formats? Should we consider epub, mobi, whatever or just pdf and html?

Presenter: HOWARD, Alexander (Imperial College (GB))

Session Classification: Parallel 2B - Documentation working session

Contribution ID: **103**

Type: **not specified**

Videos

Monday, 27 August 2018 16:45 (45 minutes)

Videos for Geant4

- tutorials
- demonstrations
- publicity/outreach

Content - what should we make videos of?

Maintenance/keeping up-to-date

Presenter: GARNIER, Laurent

Session Classification: Parallel 2B - Documentation working session

Contribution ID: **104**

Type: **not specified**

Updates on Geant4 Documentation

Monday, 27 August 2018 11:00 (15 minutes)

Presenter: HOWARD, Alexander (Imperial College (GB))

Session Classification: Plenary 2 - Collaboration tools, documentation, web

Contribution ID: **105**

Type: **not specified**

Updates on Geant4 Website/Drupal

Monday, 27 August 2018 11:15 (15 minutes)

Presenter: FOLGER, Gunter (CERN)

Session Classification: Plenary 2 - Collaboration tools, documentation, web

Contribution ID: **106**

Type: **not specified**

Updates on Geant4 Development Tools: CMake, Data

Monday, 27 August 2018 11:30 (15 minutes)

Presenter: MORGAN, Benjamin (University of Warwick (GB))

Session Classification: Plenary 2 - Collaboration tools, documentation, web

Contribution ID: **107**

Type: **not specified**

Geant4 Git Migration: Timetable and Discussion

Monday, 27 August 2018 11:45 (45 minutes)

Presenters: MORGAN, Benjamin (University of Warwick (GB)); COSMO, Gabriele (CERN); FOLGER, Gunter (CERN)

Session Classification: Plenary 2 - Collaboration tools, documentation, web

Contribution ID: **108**

Type: **not specified**

(Extension of 7A) - Machine Learning in simulation & discussion

Thursday, 30 August 2018 15:05 (25 minutes)

Presentation of what could bring Machine Learning to simulation, and discussion on it.

Primary author: BANDIERAMONTE, Marilena (CERN)

Presenter: BANDIERAMONTE, Marilena (CERN)

Session Classification: Parallel 6A - Open topics in physics lists and validation tools

Contribution ID: **109**

Type: **not specified**

(Extension of 7A) - Introduction

Thursday, 30 August 2018 15:00 (5 minutes)

Primary authors: VERDERI, Marc (Centre National de la Recherche Scientifique (FR)); POKORSKI, Witold (CERN)

Presenters: VERDERI, Marc (Centre National de la Recherche Scientifique (FR)); POKORSKI, Witold (CERN)

Session Classification: Parallel 6A - Open topics in physics lists and validation tools

Contribution ID: **110**

Type: **not specified**

Geant4 tasking model

Thursday, 30 August 2018 16:00 (20 minutes)

Presenter: MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: **111**

Type: **not specified**

Geant4 + GPUs

Thursday, 30 August 2018 16:20 (10 minutes)

Primary author: MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Presenter: MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: 112

Type: **not specified**

GeantV status and performance

Thursday, 30 August 2018 16:30 (15 minutes)

Presenter: GHEATA, Andrei (CERN)

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: 113

Type: **not specified**

Applying vectorisation to Geant4

Thursday, 30 August 2018 16:45 (15 minutes)

Primary author: GHEATA, Andrei (CERN)

Presenter: GHEATA, Andrei (CERN)

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: **114**

Type: **not specified**

Vectorisation of EM physics

Thursday, 30 August 2018 17:00 (15 minutes)

Primary author: BANDIERAMONTE, Marilena (CERN)

Presenter: BANDIERAMONTE, Marilena (CERN)

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: 115

Type: **not specified**

Vectorisation of Bertini cascade

Thursday, 30 August 2018 17:15 (15 minutes)

Primary author: LIMA, Guilherme (FermiLab (US))

Presenter: LIMA, Guilherme (FermiLab (US))

Session Classification: Parallel 7A - Medium- and longer-term R&Ds

Contribution ID: **116**

Type: **not specified**

Status of multithreading / Kernel updates

Thursday, 30 August 2018 09:00 (20 minutes)

Presenter: Dr MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Session Classification: Plenary 6 - Kernel, GUI/Vis, examples updates

Contribution ID: **117**

Type: **not specified**

GUI / Vis updates / Intercom updates

Thursday, 30 August 2018 09:20 (20 minutes)

Presenters: ALLISON, John; ASAI, Makoto (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary 6 - Kernel, GUI/Vis, examples updates

Contribution ID: **118**

Type: **not specified**

Examples updates

Thursday, 30 August 2018 09:40 (15 minutes)

Presenter: HRIVNACOVA, Ivana (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 6 - Kernel, GUI/Vis, examples updates

Contribution ID: **119**

Type: **not specified**

Analysis updates

Thursday, 30 August 2018 09:55 (20 minutes)

Presenter: BARRAND, Guy (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 6 - Kernel, GUI/Vis, examples updates

Contribution ID: **120**

Type: **not specified**

Geometry updates

Thursday, 30 August 2018 10:15 (15 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 6 - Kernel, GUI/Vis, examples updates

Contribution ID: **121**

Type: **not specified**

TiMemory performance monitoring

Tuesday, 28 August 2018 15:12 (12 minutes)

Presenter: MADSEN, Jonathan (Lawrence Berkeley National Laboratory)

Session Classification: Parallel 3B - Near-term kernel developments

Contribution ID: 122

Type: **not specified**

(Extension of 7A) - Optical Photon Mediator for Vectorization, GPU and FastSim

Friday, 31 August 2018 09:45 (10 minutes)

Primary author: JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Presenter: JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 8A - Technical aspects of hadronic physics and remaining topics

Contribution ID: **123**

Type: **not specified**

Global update on vis

Friday, 31 August 2018 09:00 (10 minutes)

Presenter: ALLISON, John

Session Classification: Parallel 8B - Updates on Vis

Contribution ID: **124**

Type: **not specified**

Qt driver status

Friday, 31 August 2018 09:30 (10 minutes)

Presenter: GARNIER, Laurent

Session Classification: Parallel 8B - Updates on Vis

Contribution ID: 125

Type: **not specified**

Inventor driver status

Friday, 31 August 2018 09:10 (10 minutes)

Presenter: JONES, Fred (TRIUMF (CA))

Session Classification: Parallel 8B - Updates on Vis

Contribution ID: 126

Type: **not specified**

Exploring G4 on Android and iOS.

Friday, 31 August 2018 09:20 (10 minutes)

Presenter: BARRAND, Guy (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 8B - Updates on Vis

Contribution ID: **127**

Type: **not specified**

Open discussion

Friday, 31 August 2018 09:50 (40 minutes)

- Open inventor
- Migration from OpenGL to Metal
- ...

Session Classification: Parallel 8B - Updates on Vis

Contribution ID: **128**

Type: **not specified**

Other driver status

Friday, 31 August 2018 09:40 (10 minutes)

Session Classification: Parallel 8B - Updates on Vis