

22nd Geant4 Collaboration Meeting

Report of Contributions

Contribution ID: 1

Type: **not specified**

Status of validation of VecGeom

Thursday 28 September 2017 09:00 (20 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Parallel 6B - Geometry working session

Contribution ID: 2

Type: **not specified**

Recent updates to voxelisation system and solids

Thursday 28 September 2017 09:20 (20 minutes)

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

Session Classification: Parallel 6B - Geometry working session

Contribution ID: 3

Type: **not specified**

Overview of new FSAL and interpolating steppers

Thursday 28 September 2017 09:40 (20 minutes)

Presenters: SOROKIN, Dmitry; APOSTOLAKIS, John (CERN)

Session Classification: Parallel 6B - Geometry working session

Contribution ID: 4

Type: **not specified**

Review of open issues and discussion

Thursday 28 September 2017 10:00 (30 minutes)

Session Classification: Parallel 6B - Geometry working session

Contribution ID: 5

Type: **not specified**

Welcome

Monday 25 September 2017 11:30 (10 minutes)

Presenter: Prof. ROSENFELD, Anatoly (CMRP, University of Wollongong)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 6

Type: **not specified**

Opening remarks

Monday 25 September 2017 11:40 (5 minutes)

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

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 7

Type: **not specified**

Open requirements - LHC and other HEP energy frontier experiments

Monday 25 September 2017 11:45 (12 minutes)

Presenter: RIBON, Alberto (CERN)

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 8

Type: **not specified**

Open requirements - HEP intensity and cosmic frontier experiments

Monday 25 September 2017 11:57 (12 minutes)

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

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 9

Type: **not specified**

Open requirements - Nuclear physics and engineering

Monday 25 September 2017 12:17 (12 minutes)

Presenter: SARMIENTO PICO, Luis Gerardo

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: **10**

Type: **not specified**

Open requirements - Space application

Monday 25 September 2017 12:29 (12 minutes)

Presenter: TAYLOR, Michael John

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: **11**

Type: **not specified**

Open requirements - Medical application

Monday 25 September 2017 12:41 (12 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 12

Type: **not specified**

Open requirements - Material science

Monday 25 September 2017 12:53 (12 minutes)

Presenter: WRIGHT, Dennis Herbert

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 13

Type: **not specified**

Report on Parallel Session 1A

Friday 29 September 2017 11:00 (7 minutes)

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

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 14

Type: **not specified**

Report on Parallel Session 1B

Friday 29 September 2017 11:07 (7 minutes)

Presenters: PERL, Joseph; GARNIER, Laurent

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 15

Type: **not specified**

Report on Parallel Session 2A

Friday 29 September 2017 11:14 (7 minutes)

Presenters: NOVAK, Mihaly (CERN); Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 16

Type: **not specified**

Report on Parallel Session 2B

Friday 29 September 2017 11:21 (7 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH)); HRIV-NACOVA, Ivana (Universite de Paris-Sud 11 (FR))

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 17

Type: **not specified**

Report on Parallel Session 3A

Friday 29 September 2017 11:28 (7 minutes)

Presenters: Dr INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR)); GUATELLI, Susanna

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: **18**

Type: **not specified**

Report on Parallel Session 3B

Friday 29 September 2017 11:35 (7 minutes)

Presenters: FOLGER, Gunter (CERN); JUN, Soon Yung

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: **19**

Type: **not specified**

Report on Parallel Session 4A

Friday 29 September 2017 11:42 (7 minutes)

Presenters: RIBON, Alberto (CERN); YARBA, Julia

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 20

Type: **not specified**

Report on Parallel Session 4B

Friday 29 September 2017 11:49 (7 minutes)

Presenters: MORGAN, Benjamin; COSMO, Gabriele (CERN)

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 21

Type: **not specified**

Report on Parallel Session 5A

Friday 29 September 2017 11:56 (7 minutes)

Presenters: RIBON, Alberto (CERN); WRIGHT, Dennis Herbert

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 22

Type: **not specified**

Report on Parallel Session 5B

Friday 29 September 2017 12:03 (7 minutes)

Presenters: INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR)); GUATELLI, Susanna

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 23

Type: **not specified**

Report on Parallel Session 6A

Friday 29 September 2017 12:10 (7 minutes)

Presenters: RIBON, Alberto (CERN); SARMIENTO PICO, Luis Gerardo

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 24

Type: **not specified**

Report on Parallel Session 6B

Friday 29 September 2017 12:17 (7 minutes)

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

Session Classification: Plenary 9 - Report from parallel sessions

Contribution ID: 25

Type: **not specified**

Report on Parallel Session 7A

Friday 29 September 2017 14:00 (7 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH)); WRIGHT, Dennis Herbert

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 26

Type: **not specified**

Report on Parallel Session 7B

Friday 29 September 2017 14:07 (7 minutes)

Presenters: APOSTOLAKIS, John (CERN); JUN, Soon Yung

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 27

Type: **not specified**

Report on Parallel Session 8A

Friday 29 September 2017 14:14 (7 minutes)

Presenters: RIBON, Alberto (CERN); FOLGER, Gunter (CERN)

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 28

Type: **not specified**

Report on Parallel Session 8B

Friday 29 September 2017 14:21 (7 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 29

Type: **not specified**

Release schedule

Friday 29 September 2017 14:28 (15 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 30

Type: **not specified**

Collaboration-wide efforts

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

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: **31**

Type: **not specified**

2018 Collaboration Meeting

Friday 29 September 2017 14:43 (15 minutes)

Presenter: SARMIENTO PICO, Luis Gerardo

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: 32

Type: **not specified**

Closing remarks

Friday 29 September 2017 14:58 (15 minutes)

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

Session Classification: Plenary 10 - Report from parallel sessions / Closing session

Contribution ID: **33**

Type: **not specified**

Geant4-DNA cross section models for gas

Tuesday 26 September 2017 16:00 (30 minutes)

Presenter: NETTLEBECK, Heidi

Session Classification: Parallel 3A - Development of new EM models, part I

Contribution ID: **34**

Type: **not specified**

New ANSTO PIXE cross sections in Geant4

Tuesday 26 September 2017 16:30 (30 minutes)

Presenter: BAKR, Samer

Session Classification: Parallel 3A - Development of new EM models, part I

Contribution ID: 35

Type: **not specified**

Geant4-DNA splitting (remote)

Presenter: RAMOS MENDEZ, Jose

Session Classification: Parallel 3A - Development of new EM models, part I

Contribution ID: **36**

Type: **not specified**

Review and update of photoeffect models (remote)

Tuesday 26 September 2017 17:00 (30 minutes)

Presenter: BANDIERAMONTE, Marinela

Session Classification: Parallel 3A - Development of new EM models, part I

Contribution ID: 37

Type: **not specified**

Geant4-DNA cross section models for gold

Wednesday 27 September 2017 16:00 (20 minutes)

Presenter: SAKATA, Dousatsu

Session Classification: Parallel 5B - Development of new EM models, part II

Contribution ID: **38**

Type: **not specified**

Geant4-DNA cross section models for liquid water

Wednesday 27 September 2017 16:20 (20 minutes)

Presenter: KYRIAKOU, Ioanna

Session Classification: Parallel 5B - Development of new EM models, part II

Contribution ID: 39

Type: **not specified**

Low energy electron scattering testing update (presented by S. Guatelli)

Wednesday 27 September 2017 16:40 (20 minutes)

Presenter: DONDERO, Paolo

Session Classification: Parallel 5B - Development of new EM models, part II

Contribution ID: 40

Type: **not specified**

Geant4 profiling performance for Medical Physics

Tuesday 26 September 2017 16:00 (20 minutes)

Presenter: CHO, Kihyeon

Session Classification: Parallel 3B - Computing performance

Contribution ID: 41

Type: **not specified**

Drupal

Monday 25 September 2017 14:00 (20 minutes)

Presenter: FOLGER, Gunter (CERN)

Session Classification: Plenary 2 - Collaboration tools

Contribution ID: 42

Type: **not specified**

Update on Geant4 CMake, Modularization, and Data

Monday 25 September 2017 14:20 (20 minutes)

Presenter: MORGAN, Benjamin

Session Classification: Plenary 2 - Collaboration tools

Contribution ID: 43

Type: **not specified**

Geant4 on Docker and Azure

Monday 25 September 2017 14:40 (20 minutes)

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary 2 - Collaboration tools

Contribution ID: 44

Type: **not specified**

Migration of Geant4 to Git

Monday 25 September 2017 15:00 (20 minutes)

Authors: MORGAN, Benjamin; COSMO, Gabriele (CERN)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 2 - Collaboration tools

Contribution ID: 45

Type: **not specified**

Update on Migration from docbook to Sphinx

Thursday 28 September 2017 14:00 (20 minutes)

Presenter: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH))

Session Classification: Plenary 8 - Documentation

Contribution ID: 46

Type: **not specified**

Common Format/Design for Web Pages (discussion)

Thursday 28 September 2017 14:20 (25 minutes)

Session Classification: Plenary 8 - Documentation

Contribution ID: 47

Type: **not specified**

The Geant4 Logo and Videos

Thursday 28 September 2017 14:45 (20 minutes)

Presenter: GARNIER, Laurent

Session Classification: Plenary 8 - Documentation

Contribution ID: 48

Type: **not specified**

Documentation of Physics Lists (discussion)

Thursday 28 September 2017 15:05 (25 minutes)

Session Classification: Plenary 8 - Documentation

Contribution ID: 49

Type: **not specified**

Muonic Atom Developments

Wednesday 27 September 2017 16:00 (15 minutes)

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

Session Classification: Parallel 5A - Hadronic models: development & validation, part II

Contribution ID: 50

Type: **not specified**

Neutrino Scattering Update

Wednesday 27 September 2017 16:15 (15 minutes)

Presenter: WRIGHT, Dennis Herbert

Session Classification: Parallel 5A - Hadronic models: development & validation, part II

Contribution ID: 51

Type: **not specified**

Validation Suite Update

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

Session Classification: Parallel 5A - Hadronic models: development & validation, part II

Contribution ID: 52

Type: **not specified**

Update on Radioactive Decay

Wednesday 27 September 2017 16:30 (15 minutes)

Presenter: WRIGHT, Dennis Herbert

Session Classification: Parallel 5A - Hadronic models: development & validation, part II

Contribution ID: 53

Type: **not specified**

Discussion

Wednesday 27 September 2017 16:45 (45 minutes)

Session Classification: Parallel 5A - Hadronic models: development & validation, part II

Contribution ID: 54

Type: **not specified**

Highlights from High Energy Hadronic Physics

Thursday 28 September 2017 11:00 (20 minutes)

Presenter: RIBON, Alberto (CERN)

Session Classification: Plenary 7 - Updates on Hadronic physics and validation (including physics lists for hadron)

Contribution ID: 55

Type: **not specified**

Highlights from Low Energy Hadronic Physics

Thursday 28 September 2017 11:20 (20 minutes)

Presenter: WRIGHT, Dennis Herbert

Session Classification: Plenary 7 - Updates on Hadronic physics and validation (including physics lists for hadron)

Contribution ID: 56

Type: **not specified**

Progress on Validation

Thursday 28 September 2017 11:40 (20 minutes)

Presenter: YARBA, Julia

Session Classification: Plenary 7 - Updates on Hadronic physics and validation (including physics lists for hadron)

Contribution ID: 57

Type: **not specified**

Process Level Tests

Thursday 28 September 2017 12:00 (20 minutes)

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary 7 - Updates on Hadronic physics and validation (including physics lists for hadron)

Contribution ID: 58

Type: **not specified**

Discussion

Thursday 28 September 2017 12:20 (10 minutes)

Session Classification: Plenary 7 - Updates on Hadronic physics and validation (including physics lists for hadron)

Contribution ID: 59

Type: **not specified**

G4CPT: LArTest

Tuesday 26 September 2017 16:30 (20 minutes)

Presenter: JUN, Soon Yung

Session Classification: Parallel 3B - Computing performance

Contribution ID: **60**

Type: **not specified**

Geometry

Tuesday 26 September 2017 09:30 (10 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 3 - Validation and tests

Contribution ID: **61**

Type: **not specified**

CMS Simulation with VecGeom

Tuesday 26 September 2017 09:40 (15 minutes)

Presenter: BANERJEE, Sunanda (Fermi National Accelerator Lab. (US))

Session Classification: Plenary 3 - Validation and tests

Contribution ID: **62**

Type: **not specified**

DoSSiER

Tuesday 26 September 2017 09:15 (15 minutes)

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

Session Classification: Plenary 3 - Validation and tests

Contribution ID: **63**

Type: **not specified**

Hadronic Physics Lists and Calorimetry

Tuesday 26 September 2017 10:20 (10 minutes)

Presenter: RIBON, Alberto (CERN)

Session Classification: Plenary 3 - Validation and tests

Contribution ID: 64

Type: **not specified**

Validation of EM Physics

Tuesday 26 September 2017 09:55 (15 minutes)

Presenters: BAGULYA, Alexandre (P.N. Lebedev Institute of Physics (FIAN)); IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary 3 - Validation and tests

Contribution ID: 65

Type: **not specified**

Validation of Hadronic Physics

Tuesday 26 September 2017 10:10 (10 minutes)

Presenter: RIBON, Alberto (CERN)

Session Classification: Plenary 3 - Validation and tests

Contribution ID: 66

Type: **not specified**

Gamma conversion models in Geant4

Wednesday 27 September 2017 17:00 (15 minutes)

Presenter: HARIRI, Farah

Session Classification: Parallel 5B - Development of new EM models, part II

Contribution ID: 67

Type: **not specified**

Validation of Geant4 for Microbeam Radiation Therapy

Tuesday 26 September 2017 14:00 (20 minutes)

Presenter: CAMERON, Mathew

Session Classification: Parallel 2A - New EM validation results

Contribution ID: **68**

Type: **not specified**

Recent developments for archaeometry

Tuesday 26 September 2017 14:20 (20 minutes)

Presenter: Dr MARTIN, Loic

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 69

Type: **not specified**

Spin relativistic corrections to the GS e-/e+ multiple scattering model

Tuesday 26 September 2017 14:40 (30 minutes)

Presenter: NOVAK, Mihaly (CERN)

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 70

Type: **not specified**

Experimental Validation of a Monte Carlo code for Breast Dosimetry applications

Tuesday 26 September 2017 15:10 (20 minutes)

Presenter: FEDON, Cristian

Session Classification: Parallel 2A - New EM validation results

Contribution ID: 71

Type: **not specified**

Status and progress in standard EM (remote)

Wednesday 27 September 2017 11:00 (30 minutes)

Presenter: IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary 6 - Updates on EM physics and validation (including physics lists for EM)

Contribution ID: 72

Type: **not specified**

Geant4 Physics Capability for Heavy Ion Therapy

Wednesday 27 September 2017 11:30 (30 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Plenary 6 - Updates on EM physics and validation (including physics lists for EM)

Contribution ID: 73

Type: **not specified**

Low-energy and DNA progress

Wednesday 27 September 2017 12:00 (30 minutes)

Presenter: INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR))

Session Classification: Plenary 6 - Updates on EM physics and validation (including physics lists for EM)

Contribution ID: 74

Type: **not specified**

CMS G4 Module Computing Performance

Tuesday 26 September 2017 16:50 (15 minutes)

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

Session Classification: Parallel 3B - Computing performance

Contribution ID: 75

Type: **not specified**

Visualization and GUIs

Wednesday 27 September 2017 09:00 (20 minutes)

Presenter: GARNIER, Laurent

Session Classification: Plenary 5 - Updates on GUI, Vis and examples

Contribution ID: 76

Type: **not specified**

Analysis and g4tools

Wednesday 27 September 2017 09:20 (20 minutes)

Presenters: HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR)); BARRAND, Guy (Universite de Paris-Sud 11 (FR))

Session Classification: Plenary 5 - Updates on GUI, Vis and examples

Contribution ID: 77

Type: **not specified**

Geant4Py

Wednesday 27 September 2017 09:40 (20 minutes)

Presenter: MURAKAMI, Koichi

Session Classification: Plenary 5 - Updates on GUI, Vis and examples

Contribution ID: 78

Type: **not specified**

Basic & Extended Examples

Wednesday 27 September 2017 10:00 (15 minutes)

Presenter: HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR))

Session Classification: Plenary 5 - Updates on GUI, Vis and examples

Contribution ID: 79

Type: **not specified**

Advanced Examples

Wednesday 27 September 2017 10:15 (15 minutes)

Presenter: ROMANO, Francesco

Session Classification: Plenary 5 - Updates on GUI, Vis and examples

Contribution ID: **80**

Type: **not specified**

New DICOM HEAD reader

Tuesday 26 September 2017 14:00 (10 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **81**

Type: **not specified**

New dna examples: icsd, mfd, slowing, spower

Tuesday 26 September 2017 14:10 (25 minutes)

Presenter: INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **82**

Type: **not specified**

New biasing/GB05,GB06 examples

Tuesday 26 September 2017 14:35 (5 minutes)

Presenter: VERDERI, Marc

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **83**

Type: **not specified**

New exoticphysics/dmparticle example

Tuesday 26 September 2017 14:40 (5 minutes)

Presenters: GRICHINE, Vladimir (Russian Academy of Sciences (RU)); IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **84**

Type: **not specified**

New radioactivedecay/Activation example

Tuesday 26 September 2017 14:45 (5 minutes)

Presenter: MAIRE, Michel (LAPP)

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **85**

Type: **not specified**

Status of Work Plan 2017 Items

Tuesday 26 September 2017 14:50 (30 minutes)

Presenter: HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR))

Session Classification: Parallel 2B - Basic and extended examples

Contribution ID: **86**

Type: **not specified**

Reading and visualizing DICOM data in GAMOS and GEANT4

Wednesday 27 September 2017 17:15 (15 minutes)

Presenter: ARCE, Pedro

Session Classification: Parallel 5B - Development of new EM models, part II

Contribution ID: 87

Type: **not specified**

Proposal on New Performance Tests for Medical Physics

Tuesday 26 September 2017 16:20 (10 minutes)

Presenter: GUATELLI, Susanna

Session Classification: Parallel 3B - Computing performance

Contribution ID: **88**

Type: **not specified**

Kernel Updates

Tuesday 26 September 2017 11:00 (20 minutes)

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

Session Classification: Plenary 4 - Updates on kernel and geometry

Contribution ID: 89

Type: **not specified**

Status of Multi-Threading

Tuesday 26 September 2017 11:20 (20 minutes)

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary 4 - Updates on kernel and geometry

Contribution ID: **90**

Type: **not specified**

Geometry & Persistency Update

Tuesday 26 September 2017 11:40 (20 minutes)

Presenter: COSMO, Gabriele (CERN)

Session Classification: Plenary 4 - Updates on kernel and geometry

Contribution ID: 91

Type: **not specified**

Status of biasing

Tuesday 26 September 2017 12:00 (20 minutes)

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

Session Classification: Plenary 4 - Updates on kernel and geometry

Contribution ID: 92

Type: **not specified**

Discussion

Tuesday 26 September 2017 12:20 (10 minutes)

Session Classification: Plenary 4 - Updates on kernel and geometry

Contribution ID: 93

Type: **not specified**

Report from ATLAS

Tuesday 26 September 2017 17:05 (15 minutes)

Presenter: APOSTOLAKIS, John (CERN)

Session Classification: Parallel 3B - Computing performance

Contribution ID: 94

Type: **not specified**

Update on High Energy Hadronic Models

Wednesday 27 September 2017 14:00 (15 minutes)

Presenter: RIBON, Alberto (CERN)

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: 95

Type: **not specified**

Highlights from Cascade Models

Wednesday 27 September 2017 14:15 (15 minutes)

Presenter: HIRTZ, Jason

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: 96

Type: **not specified**

Highlights from Precompound and Deexcitation Models

Wednesday 27 September 2017 14:30 (15 minutes)

Presenter: IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: 97

Type: **not specified**

Updates from Radioactive Decay

Presenter: WRIGHT, Dennis Herbert

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: **98**

Type: **not specified**

Discussion

Wednesday 27 September 2017 15:00 (30 minutes)

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: **99**

Type: **not specified**

Discussion

Tuesday 26 September 2017 17:20 (10 minutes)

Session Classification: Parallel 3B - Computing performance

Contribution ID: **100**

Type: **not specified**

Grid Validation Tools

Tuesday 26 September 2017 09:00 (15 minutes)

Presenter: KONSTANTINOV, Dmitri (Ministry of the Russian Federation for Atomic Energy (RU))

Session Classification: Plenary 3 - Validation and tests

Contribution ID: **101**

Type: **not specified**

DoSSiER

Monday 25 September 2017 16:00 (20 minutes)

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

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

Session Classification: Parallel 1A - Open topics in physics lists and validation tools

Contribution ID: **102**

Type: **not specified**

Geant Validation DB

Monday 25 September 2017 16:20 (20 minutes)

Author: KONSTANTINOV, Dmitri (Ministry of the Russian Federation for Atomic Energy (RU))

Presenter: KONSTANTINOV, Dmitri (Ministry of the Russian Federation for Atomic Energy (RU))

Session Classification: Parallel 1A - Open topics in physics lists and validation tools

Contribution ID: **103**

Type: **not specified**

Process Level Tests

Author: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel 1A - Open topics in physics lists and validation tools

Contribution ID: **104**

Type: **not specified**

Physics List Documentation

Monday 25 September 2017 16:40 (20 minutes)

Author: WRIGHT, Dennis Herbert

Presenter: WRIGHT, Dennis Herbert

Session Classification: Parallel 1A - Open topics in physics lists and validation tools

Contribution ID: **105**

Type: **not specified**

Introduction

Friday 29 September 2017 09:00 (5 minutes)

Authors: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Presenters: HOWARD, Alexander (Eidgenoessische Technische Hochschule Zuerich (CH)); VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Parallel 8B - Status of biasing

Contribution ID: **106**

Type: **not specified**

Independent geometrical biasing of multiple particle types : the case of electrons in radiotherapy

Friday 29 September 2017 09:05 (20 minutes)

In radiotherapy, biasing of bremsstrahlung photons can lead to large speed-up. But electrons sometimes hit the patient, with large weights compared to the photon ones. A geometrical biasing may alleviate the effect, but this could not be done so far.

Author: SAWKEY, Daren

Presenter: SAWKEY, Daren

Session Classification: Parallel 8B - Status of biasing

Contribution ID: **107**

Type: **not specified**

Interaction forcing for reverse gamma

Friday 29 September 2017 09:25 (20 minutes)

The implementation of interaction forcing for reverse gamma will be discussed as well as other ideas.

Author: DESORGHER, Laurent

Presenter: DESORGHER, Laurent

Session Classification: Parallel 8B - Status of biasing

Contribution ID: **108**

Type: **not specified**

Channeling process interface to generic biasing : pending issues

Friday 29 September 2017 09:45 (10 minutes)

Author: BAGLI, Enrico (Universita di Ferrara & INFN (IT))

Presenter: BAGLI, Enrico (Universita di Ferrara & INFN (IT))

Session Classification: Parallel 8B - Status of biasing

Contribution ID: **109**

Type: **not specified**

Status of generic biasing

Friday 29 September 2017 09:55 (20 minutes)

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

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

Session Classification: Parallel 8B - Status of biasing

Contribution ID: **110**

Type: **not specified**

Discussion

Friday 29 September 2017 10:15 (15 minutes)

Session Classification: Parallel 8B - Status of biasing

Contribution ID: 111

Type: **not specified**

Ion fragmentation in ion therapy

Thursday 28 September 2017 09:00 (15 minutes)

Presenter: BOLST, David (Centre For Medical Radiation Physics, University of Wollongong)

Session Classification: Parallel 6A - Low-energy hadronic physics

Contribution ID: 112

Type: **not specified**

Validation of fragmentation in vivo

Thursday 28 September 2017 09:15 (15 minutes)

Presenter: CHACON, Andrew

Session Classification: Parallel 6A - Low-energy hadronic physics

Contribution ID: **113**

Type: **not specified**

Low energy neutron updates

Thursday 28 September 2017 09:45 (15 minutes)

Presenter: KOI, Tatsumi (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel 6A - Low-energy hadronic physics

Contribution ID: 114

Type: **not specified**

Hadronic developer parameters

Thursday 28 September 2017 10:00 (15 minutes)

Presenter: KOI, Tatsumi (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel 6A - Low-energy hadronic physics

Contribution ID: 115

Type: **not specified**

Validation of Geant4 Physics List using CMS Data

Wednesday 27 September 2017 14:45 (15 minutes)

Presenter: BANERJEE, Sunanda (Fermi National Accelerator Lab. (US))

Session Classification: Parallel 4A - Hadronic models: development & validation, part I

Contribution ID: **116**

Type: **not specified**

Deterministic transport independent of the order of tracking

Thursday 28 September 2017 16:00 (20 minutes)

Presenter: SAVIN, Dmitry (Dukhov Research Institute of Automatics (VNIIA))

Session Classification: Parallel 7B - Parallelism and vectorization

Contribution ID: **117**

Type: **not specified**

Update on GeantV

Thursday 28 September 2017 16:20 (20 minutes)

Presenter: CARMINATI, Federico (CERN)

Session Classification: Parallel 7B - Parallelism and vectorization

Contribution ID: **118**

Type: **not specified**

Enabling vectorisation in Geant4 and single-particle GeantV tracking

Thursday 28 September 2017 16:40 (20 minutes)

Point(s) for discussion - expected components that could benefit most; infrastructure required; how to explore

Presenter: APOSTOLAKIS, John (CERN)

Session Classification: Parallel 7B - Parallelism and vectorization

Contribution ID: **119**

Type: **not specified**

Discussion

Thursday 28 September 2017 17:00 (30 minutes)

Session Classification: Parallel 7B - Parallelism and vectorization

Contribution ID: **120**

Type: **not specified**

Use of Git in CMS

Wednesday 27 September 2017 14:00 (10 minutes)

Presenter: IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel 4B - Migration of Geant4 Version Control to Git Working Session

Contribution ID: **121**

Type: **not specified**

Use of Git in ATLAS

Wednesday 27 September 2017 14:10 (10 minutes)

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel 4B - Migration of Geant4 Version Control to Git Working Session

Contribution ID: 122

Type: **not specified**

Carbon fragmentation measurements and validation of the Geant4 nuclear reaction models for hadrontherapy

Thursday 28 September 2017 09:30 (15 minutes)

Presenters: MANCINI TERRACCIANO, Carlo (Sapienza Universita e INFN, Roma I (IT)); PANDOLA, Luciano (INFN-LNS)

Session Classification: Parallel 6A - Low-energy hadronic physics

Contribution ID: 123

Type: **not specified**

HEP Software Foundation Community White Paper

Monday 25 September 2017 12:09 (8 minutes)

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

Session Classification: Plenary 1 - Opening address / open requirements

Contribution ID: 124

Type: **not specified**

GPU Optical Photon Simulation for Particle Physics with NVIDIA OptiX

Monday 25 September 2017 16:00 (20 minutes)

Presenter: BLYTH, simon

Session Classification: Parallel 1B - Visualization

Contribution ID: 125

Type: **not specified**

Discussion

Monday 25 September 2017 16:20 (40 minutes)

Session Classification: Parallel 1B - Visualization

Contribution ID: **126**

Type: **not specified**

Discussion

Wednesday 27 September 2017 14:20 (1h 10m)

Session Classification: Parallel 4B - Migration of Geant4 Version Control to Git Working Session

Contribution ID: 127

Type: **not specified**

Technical Aspects of Varying Hadronic Model Parameters and Studying Sensitivity of Simulated Results

Friday 29 September 2017 09:20 (20 minutes)

Presenter: YARBA, Julia

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

Contribution ID: **128**

Type: **not specified**

Documenting Physics List Extended Examples

Thursday 28 September 2017 16:00 (15 minutes)

Presenter: HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR))

Session Classification: Parallel 7A - Documentation working session

Contribution ID: **129**

Type: **not specified**

Requests for physics model documentation

Thursday 28 September 2017 16:15 (15 minutes)

Session Classification: Parallel 7A - Documentation working session

Contribution ID: **130**

Type: **not specified**

Discussion of Automated Documentation

Thursday 28 September 2017 16:30 (15 minutes)

Session Classification: Parallel 7A - Documentation working session

Contribution ID: **131**

Type: **not specified**

Working session

Thursday 28 September 2017 16:45 (45 minutes)

Session Classification: Parallel 7A - Documentation working session

Contribution ID: 132

Type: **not specified**

Complete description of the $^{12}\text{C}(n,n'\alpha)$ and $^{12}\text{C}(n,\alpha)^9\text{Be}$ reactions in the High Precision neutron model

Friday 29 September 2017 09:00 (20 minutes)

Presenter: GARCIA RIOS, Aczel Regino (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)

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

Contribution ID: 133

Type: **not specified**

Discussion

Friday 29 September 2017 09:40 (50 minutes)

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