

18th Geant4 Collaboration Meeting

Report of Contributions

Contribution ID: 0

Type: **not specified**

Geant4 10.0.0beta: first results for MT (performance, physics validation, reproducibility)

Tuesday, 24 September 2013 09:30 (20 minutes)

Presenters: Dr RIBON, Alberto (CERN); JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Session Classification: Plenary session 3 - Geant4 version 10 (part 1)

Contribution ID: 1

Type: **not specified**

Migration of examples and user code to MT mode

Tuesday, 24 September 2013 09:50 (25 minutes)

Presenters: Dr HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR)); GUMPLINGER, Peter (Eidgenossische Technische Hochschule Zurich/ETH (ETH))

Session Classification: Plenary session 3 - Geant4 version 10 (part 1)

Contribution ID: 2

Type: **not specified**

New run category main interfaces: changes to MT

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

Contribution ID: 3

Type: **not specified**

Multi-threading in Geant4: a general introduction

Tuesday, 24 September 2013 09:00 (30 minutes)

Presenter: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio)

Session Classification: Plenary session 3 - Geant4 version 10 (part 1)

Contribution ID: 4

Type: **not specified**

Path to Version 10.0: review of missing action items and discussion

Tuesday, 24 September 2013 10:15 (30 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); GUMPLINGER, Peter (Eidgenossische Technische Hochschule Zurich/ETH (ETH))

Session Classification: Plenary session 3 - Geant4 version 10 (part 1)

Contribution ID: 5

Type: **not specified**

Cross Sections improvements for MT

Thursday, 26 September 2013 15:20 (20 minutes)

Presenter: POKORSKI, Witold (CERN)

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: 6

Type: **not specified**

Reducing memory footprint: strategies for MT

Thursday, 26 September 2013 15:00 (20 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: 7

Type: **not specified**

Use of Ions in HAD for MT

Thursday, 26 September 2013 15:40 (10 minutes)

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

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: 8

Type: **not specified**

General ideas and next year plans for HAD and MT: Introduction

Thursday, 26 September 2013 14:30 (10 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: 9

Type: **not specified**

Discussion

Thursday, 26 September 2013 15:50 (30 minutes)

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: **10**

Type: **not specified**

FNAL Validation DB status

Monday, 23 September 2013 14:30 (20 minutes)

Presenters: Dr WENZEL, Hans-Joachim (Fermi National Accelerator Lab. (US)); YARBA, Julia (Fermi National Accelerator Lab. (US))

Session Classification: Parallel session 1B - Physics validation tools

Contribution ID: **11**

Type: **not specified**

CERN SimplifiedCalorimeter web-system

Monday, 23 September 2013 14:50 (20 minutes)

Presenter: LESTARIS, George (University of Athens (GR))

Session Classification: Parallel session 1B - Physics validation tools

Contribution ID: 12

Type: **not specified**

Sharing common code in ctest based testing

Monday, 23 September 2013 15:10 (20 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); Dr WENZEL, Hans-Joachim (Fermi National Accelerator Lab. (US))

Session Classification: Parallel session 1B - Physics validation tools

Contribution ID: 13

Type: **not specified**

Test and observable inventory for ctest/cdash automatic testing

Monday, 23 September 2013 15:30 (20 minutes)

Presenters: Dr RIBON, Alberto (CERN); DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel session 1B - Physics validation tools

Contribution ID: **14**

Type: **not specified**

Discussion time

Monday, 23 September 2013 15:50 (10 minutes)

Session Classification: Parallel session 1B - Physics validation tools

Contribution ID: 15

Type: **not specified**

INCL++ Development for 10.0

Tuesday, 24 September 2013 17:20 (20 minutes)

Presenter: Dr MANCUSI, Davide

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: **16**

Type: **not specified**

BERT Development for 10.0

Tuesday, 24 September 2013 17:40 (20 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: 17

Type: **not specified**

Hadronic Performance toward 10.0

Tuesday, 24 September 2013 17:00 (20 minutes)

Presenter: BANERJEE, Sunanda (Saha Institute of Nuclear Physics (IN))

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: **18**

Type: **not specified**

Hadronic Process Interface changes for MT

Thursday, 26 September 2013 14:40 (20 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 7B - Hadronics issues related to MT

Contribution ID: **19**

Type: **not specified**

Status of development of the Unified Solids library

Tuesday, 24 September 2013 17:00 (45 minutes)

Presenter: GAYER, Marek (CERN)

Session Classification: Parallel session 4B - Geometry work session

Contribution ID: **20**

Type: **not specified**

Developments for multi-threading: work-spaces

Tuesday, 24 September 2013 18:05 (20 minutes)

Presenter: APOSTOLAKIS, John (CERN)

Session Classification: Parallel session 4B - Geometry work session

Contribution ID: 21

Type: **not specified**

Use of precise safety by EM processes & open issues

Tuesday, 24 September 2013 18:25 (20 minutes)

Presenters: APOSTOLAKIS, John (CERN); Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel session 4B - Geometry work session

Contribution ID: 22

Type: **not specified**

Discussion

Tuesday, 24 September 2013 18:45 (15 minutes)

Session Classification: Parallel session 4B - Geometry work session

Contribution ID: 23

Type: **not specified**

Status of developments in the Geometry

Tuesday, 24 September 2013 11:15 (20 minutes)

Presenter: Dr COSMO, Gabriele (CERN)

Session Classification: Plenary session 4 - Developments in kernel (non-MT)

Contribution ID: 24

Type: **not specified**

Recent developments in particles

Tuesday, 24 September 2013 11:50 (25 minutes)

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

Session Classification: Plenary session 4 - Developments in kernel (non-MT)

Contribution ID: 25

Type: **not specified**

Update on Event biasing

Tuesday, 24 September 2013 12:15 (25 minutes)

Presenter: Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Plenary session 4 - Developments in kernel (non-MT)

Contribution ID: 26

Type: **not specified**

Update on Tracking

Tuesday, 24 September 2013 11:35 (15 minutes)

Presenter: SASAKI, Takashi (High Energy Accelerator Research Organization)

Session Classification: Plenary session 4 - Developments in kernel (non-MT)

Contribution ID: 27

Type: **not specified**

Update on physics vectors and global functions

Tuesday, 24 September 2013 12:40 (20 minutes)

Presenter: Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary session 4 - Developments in kernel (non-MT)

Contribution ID: 28

Type: **not specified**

Recent Muon Stopping Developments

Tuesday, 24 September 2013 18:20 (20 minutes)

Presenters: GENSER, Krzysztof (Fermilab); GENSER, Krzysztof (Fermi National Accelerator Laboratory (US))

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: 29

Type: **not specified**

NeutronHP Development and Plans

Tuesday, 24 September 2013 18:40 (20 minutes)

Presenter: MENDOZA CEMBRANOS, Emilio (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: **30**

Type: **not specified**

An Update on the Geant Vector Prototype

Thursday, 26 September 2013 17:00 (20 minutes)

Presenter: Mr CARMINATI, Federico (CERN)

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: **31**

Type: **not specified**

Discussion

Thursday, 26 September 2013 17:20 (10 minutes)

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: 32

Type: **not specified**

An Update on a GPU Prototype

Thursday, 26 September 2013 17:30 (20 minutes)

Presenters: CANAL, Philippe (Fermi National Accelerator Lab. (US)); JUN, Soon Yung (Fermi National Accelerator Lab. (US))

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: **33**

Type: **not specified**

Discussion

Thursday, 26 September 2013 17:50 (10 minutes)

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: 34

Type: **not specified**

G4CP Results and Issues from ALICE

Tuesday, 24 September 2013 14:30 (15 minutes)

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: Parallel session 3A - Computing performance

Contribution ID: 35

Type: **not specified**

G4CP Results and Issues from ATLAS

Tuesday, 24 September 2013 14:45 (15 minutes)

Presenters: APOSTOLAKIS, John (CERN); CHAPMAN, John Derek (University of Cambridge (GB)); MARSHALL, Zachary Louis (Lawrence Berkeley National Lab. (US))

Session Classification: Parallel session 3A - Computing performance

Contribution ID: 36

Type: **not specified**

G4CP Results and Issues from CMS

Tuesday, 24 September 2013 15:00 (15 minutes)

Presenter: Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel session 3A - Computing performance

Contribution ID: 37

Type: **not specified**

G4MT CP on MIC Architecture

Tuesday, 24 September 2013 15:15 (15 minutes)

Presenter: DOTTL, Andrea (Geant 4 Associates International Experts in Radiation Simulatio)

Session Classification: Parallel session 3A - Computing performance

Contribution ID: **38**

Type: **not specified**

G4CPT Profiling Tools and Results

Tuesday, 24 September 2013 15:30 (15 minutes)

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

Session Classification: Parallel session 3A - Computing performance

Contribution ID: **39**

Type: **not specified**

EM Code Review

Tuesday, 24 September 2013 15:45 (15 minutes)

Presenter: GENSER, Krzysztof (Fermilab)

Session Classification: Parallel session 3A - Computing performance

Contribution ID: 40

Type: **not specified**

Summary of hadronic validation efforts

Monday, 23 September 2013 16:30 (20 minutes)

Presenter: Dr YARBA, Julia (Fermilab)

Session Classification: Parallel session 2B - Hadronic testing

Contribution ID: 41

Type: **not specified**

Factorization of common code for the hadronic tests

Monday, 23 September 2013 17:10 (15 minutes)

Presenter: Dr YARBA, Julia (Fermilab)

Session Classification: Parallel session 2B - Hadronic testing

Contribution ID: 42

Type: **not specified**

Hadronic system tests: evolving from "run to completion" to checking the output

Monday, 23 September 2013 16:50 (20 minutes)

Presenter: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio)

Session Classification: Parallel session 2B - Hadronic testing

Contribution ID: 43

Type: **not specified**

Discussion time

Monday, 23 September 2013 17:25 (35 minutes)

Session Classification: Parallel session 2B - Hadronic testing

Contribution ID: 44

Type: **not specified**

Introduction and Outline

Monday, 23 September 2013 14:30 (15 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 1A - Geant4 general paper

Contribution ID: 45

Type: **not specified**

Extensions and Validation

Monday, 23 September 2013 14:45 (25 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 1A - Geant4 general paper

Contribution ID: 46

Type: **not specified**

Discussion of Reference Papers

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Contribution ID: 47

Type: **not specified**

Section Discussions

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Contribution ID: 48

Type: **not specified**

Anticipated Needs of LHC and Calice

Thursday, 26 September 2013 17:00 (20 minutes)

Presenter: Dr RIBON, Alberto (CERN)

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 49

Type: **not specified**

New Fission Model

Thursday, 26 September 2013 17:20 (20 minutes)

Presenter: WENDT, Brycen Linn

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 50

Type: **not specified**

The Frontiers of Geant4 Hadronic Physics

Thursday, 26 September 2013 17:40 (10 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 51

Type: **not specified**

Discussion

Thursday, 26 September 2013 17:50 (20 minutes)

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 52

Type: **not specified**

NeutronHP, Hadronic Framework

Thursday, 26 September 2013 18:10 (10 minutes)

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

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 53

Type: **not specified**

Simpler High Energy Models

Thursday, 26 September 2013 18:20 (10 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 54

Type: **not specified**

Discussion

Thursday, 26 September 2013 18:30 (30 minutes)

Session Classification: Parallel session 8B - Improvement & Future of Hadronics Physics & Software

Contribution ID: 55

Type: **not specified**

Hadronic Development Highlights

Thursday, 26 September 2013 11:15 (30 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: 56

Type: **not specified**

Hadronic Cross Sections

Thursday, 26 September 2013 11:45 (10 minutes)

Presenter: POKORSKI, Witold (CERN)

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: 57

Type: **not specified**

Physics Lists

Thursday, 26 September 2013 11:55 (10 minutes)

Presenter: FOLGER, Gunter (CERN)

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: 58

Type: **not specified**

Hadronic Showers

Thursday, 26 September 2013 12:05 (15 minutes)

Presenter: Dr RIBON, Alberto (CERN)

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: 59

Type: **not specified**

Predicting Properties and Performance of Calorimeters

Thursday, 26 September 2013 12:20 (15 minutes)

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

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: **60**

Type: **not specified**

Discussion

Thursday, 26 September 2013 12:35 (25 minutes)

Session Classification: Plenary session 8 - Hadronic physics

Contribution ID: **61**

Type: **not specified**

Developments in Radioactive Decay

Tuesday, 24 September 2013 18:00 (20 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 4A - Recent Hadronics developments and results

Contribution ID: **62**

Type: **not specified**

CMake/CTest/CDash

Monday, 23 September 2013 11:15 (20 minutes)

Primary authors: Dr MORGAN, Benjamin (University of Warwick); FOLGER, Gunter (CERN)

Presenter: Dr MORGAN, Benjamin (University of Warwick)

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: **63**

Type: **not specified**

CDash/CTest

Presenter: FOLGER, Gunter (CERN)

Contribution ID: **64**

Type: **not specified**

Coverity, Valgrind

Monday, 23 September 2013 11:39 (10 minutes)

Presenter: Dr COSMO, Gabriele (CERN)

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: 65

Type: **not specified**

Hadronic physics validation tool

Monday, 23 September 2013 11:51 (10 minutes)

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

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: **66**

Type: **not specified**

Grid validation tool

Monday, 23 September 2013 12:15 (10 minutes)

Presenter: POKORSKI, Witold (CERN)

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: 67

Type: **not specified**

JIRA-based tools and Bugzilla

Monday, 23 September 2013 12:03 (10 minutes)

Presenter: MURAKAMI, Koichi (High Energy Accelerator Research Organization (JP))

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: **68**

Type: **not specified**

Publication Board procedures

Monday, 23 September 2013 12:27 (10 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: **69**

Type: **not specified**

Web pages

Monday, 23 September 2013 12:39 (10 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 2 - Collaboration tools / testing / validation

Contribution ID: 70

Type: **not specified**

Status of Documents

Wednesday, 25 September 2013 09:00 (20 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 5 - Geant4 version 10 (part 2)

Contribution ID: 71

Type: **not specified**

Basic and Extended Examples

Wednesday, 25 September 2013 09:20 (20 minutes)

Co-author: GUMPLINGER, Peter (Eidgenossische Technische Hochschule Zurich/ETH (ETH))

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

Session Classification: Plenary session 5 - Geant4 version 10 (part 2)

Contribution ID: 72

Type: **not specified**

Advanced Examples

Wednesday, 25 September 2013 09:40 (20 minutes)

Presenter: ROMANO, Francesco (Unknown)

Session Classification: Plenary session 5 - Geant4 version 10 (part 2)

Contribution ID: 73

Type: **not specified**

Computing performance monitoring

Wednesday, 25 September 2013 10:00 (20 minutes)

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

Session Classification: Plenary session 5 - Geant4 version 10 (part 2)

Contribution ID: 74

Type: **not specified**

Physics validation

Wednesday, 25 September 2013 10:20 (20 minutes)

Presenter: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio)

Session Classification: Plenary session 5 - Geant4 version 10 (part 2)

Contribution ID: 75

Type: **not specified**

Report from Parallel Session 1A - Geant4 general paper

Friday, 27 September 2013 09:00 (10 minutes)

Presenters: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US)); KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: 76

Type: **not specified**

Report from Parallel Session 1B - Physics validation tools

Friday, 27 September 2013 09:10 (10 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); Dr WENZEL, Hans-Joachim (Fermi National Accelerator Lab. (US))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: 77

Type: **not specified**

Report from Parallel Session 2A - Biasing

Friday, 27 September 2013 09:20 (10 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Tech. Hochschule Zuerich (CH)); Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: 78

Type: **not specified**

Report from Parallel Session 2B - Hadronic testing

Friday, 27 September 2013 09:30 (10 minutes)

Presenters: FOLGER, Gunter (CERN); Dr YARBA, Julia (Fermilab)

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: 79

Type: **not specified**

Report from Parallel Session 3A - Computing performance

Friday, 27 September 2013 09:40 (10 minutes)

Presenters: JUN, Soon Yung (Fermi National Accelerator Lab. (US)); ELVIRA, Victor Daniel (Fermi National Accelerator Lab. (US))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: **80**

Type: **not specified**

Report from Parallel Session 3B - Visualization / GUI

Friday, 27 September 2013 09:50 (10 minutes)

Presenters: PERL, Joseph (CERN); Dr MURAKAMI, Koichi (KEK)

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: **81**

Type: **not specified**

Report from Parallel Session 4A - Recent Hadronics developments and results

Friday, 27 September 2013 10:00 (10 minutes)

Presenters: Dr RIBON, Alberto (CERN); KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: **82**

Type: **not specified**

Report from Parallel Session 4B - Geometry work session

Friday, 27 September 2013 10:10 (10 minutes)

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

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: **83**

Type: **not specified**

Report from Parallel Session 5A - New EM models and interfaces

Friday, 27 September 2013 10:20 (10 minutes)

Presenters: INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR)); Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: **84**

Type: **not specified**

Report from Parallel Session 5B - Basic and Extended Examples

Friday, 27 September 2013 10:30 (10 minutes)

Presenters: Dr HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR)); GUMPLINGER, Peter (Eidgenossische Technische Hochschule Zurich/ETH (ETH))

Session Classification: Plenary session 9 - Report from parallel sessions

Contribution ID: 85

Type: **not specified**

Report from Parallel Session 7A - New EM Validation results

Friday, 27 September 2013 11:15 (10 minutes)

Presenters: INCERTI, Sebastien Laurent (Centre National de la Recherche Scientifique (FR)); Prof. IVANTCHENKO, Vladimir (CERN)

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

Contribution ID: **86**

Type: **not specified**

Report from Parallel Session 7B - Hadronics issues related to MT

Friday, 27 September 2013 11:25 (10 minutes)

Presenters: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio); POKORSKI, Witold (CERN)

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

Contribution ID: 87

Type: **not specified**

Report from Parallel Session 8A - Vectorization / GPU

Friday, 27 September 2013 11:35 (10 minutes)

Presenters: SASAKI, Takashi (High Energy Accelerator Research Organization (JP)); ELVIRA, Victor Daniel (Fermi National Accelerator Lab. (US))

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

Contribution ID: **88**

Type: **not specified**

Report from Parallel Session 8B - Improvement & Future of Hadronics Physics & Software

Friday, 27 September 2013 11:45 (10 minutes)

Presenters: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US)); Dr KOI, Tatsu-
sumi (SLAC National Accelerator Laboratory (US))

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

Contribution ID: **89**

Type: **not specified**

Release schedule

Friday, 27 September 2013 11:55 (10 minutes)

Presenter: Dr COSMO, Gabriele (CERN)

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

Contribution ID: **90**

Type: **not specified**

Closing remarks

Friday, 27 September 2013 12:10 (20 minutes)

Presenters: Dr ASAI, Makoto (SLAC National Accelerator Laboratory (US)); Dr VERDERI, Marc (Ecole Polytechnique (FR))

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

Contribution ID: **91**

Type: **not specified**

Discussion of Reference Papers

Monday, 23 September 2013 15:10 (20 minutes)

Presenter: WRIGHT, Dennis Herbert (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 1A - Geant4 general paper

Contribution ID: 92

Type: **not specified**

Discussion of Section Content

Monday, 23 September 2013 15:30 (20 minutes)

Presenter: KELSEY, Michael (SLAC National Accelerator Laboratory (US))

Session Classification: Parallel session 1A - Geant4 general paper

Contribution ID: 93

Type: **not specified**

MC2013 Poster and Demonstration

Monday, 23 September 2013 15:50 (10 minutes)

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

Session Classification: Parallel session 1A - Geant4 general paper

Contribution ID: **94**

Type: **not specified**

Welcome

Monday, 23 September 2013 09:00 (15 minutes)

Presenter: Dr QUESADA MOLINA, Jose Manuel (Universidad de Sevilla (ES))

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: 95

Type: **not specified**

Meeting Goals

Monday, 23 September 2013 09:15 (15 minutes)

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

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: **96**

Type: **not specified**

HEP - Energy Frontier

Monday, 23 September 2013 09:30 (15 minutes)

Presenter: Dr RIBON, Alberto (CERN)

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: 97

Type: **not specified**

HEP - Intensity Frontier

Monday, 23 September 2013 09:45 (15 minutes)

Presenter: GENSER, Krzysztof (Fermilab)

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: **98**

Type: **not specified**

HEP - Cosmic Frontier and Material Science

Monday, 23 September 2013 10:00 (15 minutes)

Presenter: DOTTI, Andrea (Geant 4 Associates International Experts in Radiation Simulatio)

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: **99**

Type: **not specified**

Space

Monday, 23 September 2013 10:15 (15 minutes)

Presenter: HOWARD, Alexander (Eidgenoessische Tech. Hochschule Zuerich (CH))

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: **100**

Type: **not specified**

Medical

Monday, 23 September 2013 10:30 (15 minutes)

Presenter: PERL, Joseph (CERN)

Session Classification: Plenary session 1 - Opening addresses / open requirements

Contribution ID: **101**

Type: **not specified**

Introduction

Monday, 23 September 2013 16:30 (5 minutes)

Presenter: Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Parallel session 2A - Biasing

Contribution ID: **102**

Type: **not specified**

Progress in generic biasing development

Monday, 23 September 2013 16:35 (20 minutes)

Presenter: Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Parallel session 2A - Biasing

Contribution ID: **103**

Type: **not specified**

Biasing in EM

Monday, 23 September 2013 16:55 (15 minutes)

Presenters: SAWKEY, Daren Lewis; Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Parallel session 2A - Biasing

Contribution ID: **104**

Type: **not specified**

Progress in Reverse MC (pres. by Alex, on behalf of Laurent)

Monday, 23 September 2013 17:10 (10 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Tech. Hochschule Zuerich (CH)); DESORGHER, Laurent (SpaceIT GmbH)

Session Classification: Parallel session 2A - Biasing

Contribution ID: **105**

Type: **not specified**

Introducing Channeling Effects

Monday, 23 September 2013 17:20 (15 minutes)

Presenter: BAGLI, Enrico

Session Classification: Parallel session 2A - Biasing

Contribution ID: **106**

Type: **not specified**

Discussion - 1 : directory structure for new code

Monday, 23 September 2013 17:35 (15 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Tech. Hochschule Zuerich (CH)); Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Parallel session 2A - Biasing

Contribution ID: **107**

Type: **not specified**

Discussion - 2 : testing, validation, examples

Monday, 23 September 2013 17:50 (10 minutes)

Presenters: HOWARD, Alexander (Eidgenoessische Tech. Hochschule Zuerich (CH)); Dr VERDERI, Marc (Ecole Polytechnique (FR))

Session Classification: Parallel session 2A - Biasing

Contribution ID: **108**

Type: **not specified**

Optimizing geometry routines for (SIMD)vector particle tracking: A status report

Tuesday, 24 September 2013 17:45 (20 minutes)

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: Parallel session 4B - Geometry work session

Contribution ID: **109**

Type: **not specified**

Status of standard EM

Thursday, 26 September 2013 09:00 (30 minutes)

Presenter: Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Plenary session 7 - EM physics

Contribution ID: **110**

Type: **not specified**

Status of LowE EM

Thursday, 26 September 2013 09:30 (30 minutes)

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

Session Classification: Plenary session 7 - EM physics

Contribution ID: **111**

Type: **not specified**

Radiolysis

Thursday, 26 September 2013 10:00 (30 minutes)

Presenter: KARAMITROS, Mathieu (Centre d'Etudes Nucléaires de Bordeaux-Gradignan (CENBG))

Session Classification: Plenary session 7 - EM physics

Contribution ID: 112

Type: **not specified**

Archeometry using Geant4 EM physics

Thursday, 26 September 2013 14:30 (20 minutes)

Presenter: Mr MARTIN, Loic (Bordeaux 3 University, France)

Session Classification: Parallel session 7A - New EM Validation results

Contribution ID: **113**

Type: **not specified**

Validation of Geant4 proton scattering (by Skype)

Thursday, 26 September 2013 14:50 (20 minutes)

Presenter: SCHWARZ, Sacha

Session Classification: Parallel session 7A - New EM Validation results

Contribution ID: 114

Type: **not specified**

EM physics for proton therapy

Thursday, 26 September 2013 15:10 (20 minutes)

Presenter: Mr SHIN, Jae Ik (National Cancer Center, Seoul)

Session Classification: Parallel session 7A - New EM Validation results

Contribution ID: **115**

Type: **not specified**

Electron multiple scattering in Geant4

Thursday, 26 September 2013 15:30 (20 minutes)

Primary author: SAWKEY, Daren Lewis

Presenter: SAWKEY, Daren Lewis

Session Classification: Parallel session 7A - New EM Validation results

Contribution ID: **116**

Type: **not specified**

PIXE spectra of complex samples

Wednesday, 25 September 2013 14:30 (20 minutes)

Presenter: CANAVEIRA GOUVEIA TABORDA, Ana

Session Classification: Parallel session 5A - New EM models and interfaces

Contribution ID: **117**

Type: **not specified**

New low energy gamma models

Wednesday, 25 September 2013 14:50 (20 minutes)

Presenter: BROWN, Jeremy

Session Classification: Parallel session 5A - New EM models and interfaces

Contribution ID: **118**

Type: **not specified**

New low energy electron models

Wednesday, 25 September 2013 15:10 (20 minutes)

Presenter: Mr MADSEN, Jonathan

Session Classification: Parallel session 5A - New EM models and interfaces

Contribution ID: **119**

Type: **not specified**

EM code review

Wednesday, 25 September 2013 15:30 (20 minutes)

Presenter: GENSER, Krzysztof (Fermilab)

Session Classification: Parallel session 5A - New EM models and interfaces

Contribution ID: 120

Type: **not specified**

Geant4 based simulation of radiotherapy in CUDA

Thursday, 26 September 2013 18:00 (20 minutes)

Presenter: MURAKAMI, Koichi (High Energy Accelerator Research Organization (JP))

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: **121**

Type: **not specified**

Geant4 based simulation of radiotherapy in CUDA

Presenter: MURAKAMI, Koichi (High Energy Accelerator Research Organization (JP))

Contribution ID: **122**

Type: **not specified**

Discussion

Thursday, 26 September 2013 18:20 (10 minutes)

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: 123

Type: **not specified**

Hybrid GATE: A CPU/GPU implementation for imaging and therapy applications

Thursday, 26 September 2013 18:30 (20 minutes)

Presenter: BERTE, Julien

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: **124**

Type: **not specified**

Discussion

Thursday, 26 September 2013 18:50 (10 minutes)

Session Classification: Parallel session 8A - Vectorization / GPU

Contribution ID: 125

Type: **not specified**

Discussion

Thursday, 26 September 2013 10:30 (15 minutes)

Session Classification: Plenary session 7 - EM physics

Contribution ID: 126

Type: **not specified**

Testing graphics in Geant4 tests (test202)

Wednesday, 25 September 2013 14:30 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 5B - Basic and Extended Examples

Contribution ID: 127

Type: **not specified**

Examples with Macros and Other Resources

Wednesday, 25 September 2013 15:00 (10 minutes)

Presenter: Dr MORGAN, Benjamin (University of Warwick)

Session Classification: Parallel session 5B - Basic and Extended Examples

Contribution ID: 128

Type: **not specified**

Status of the planned developments: coding guidelines, MT migration, g4tools migration, code review

Wednesday, 25 September 2013 15:10 (30 minutes)

Presenters: Dr HRIVNACOVA, Ivana (Universite de Paris-Sud 11 (FR)); GUMPLINGER, Peter (Eidgenossische Technische Hochschule Zurich/ETH (ETH))

Session Classification: Parallel session 5B - Basic and Extended Examples

Contribution ID: **129**

Type: **not specified**

Disussion

Wednesday, 25 September 2013 15:40 (20 minutes)

Session Classification: Parallel session 5B - Basic and Extended Examples

Contribution ID: **130**

Type: **not specified**

Updates on Intercoms / Interfaces

Wednesday, 25 September 2013 11:15 (25 minutes)

Presenter: MURAKAMI, Koichi (High Energy Accelerator Research Organization (JP))

Session Classification: Plenary session 6 - GUI / Vis / Analysis updates

Contribution ID: **131**

Type: **not specified**

Visualization

Wednesday, 25 September 2013 11:40 (25 minutes)

Presenter: PERL, Joseph (CERN)

Session Classification: Plenary session 6 - GUI / Vis / Analysis updates

Contribution ID: **132**

Type: **not specified**

Qt

Wednesday, 25 September 2013 12:05 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Plenary session 6 - GUI / Vis / Analysis updates

Contribution ID: **133**

Type: **not specified**

Analysis

Wednesday, 25 September 2013 12:20 (20 minutes)

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

Session Classification: Plenary session 6 - GUI / Vis / Analysis updates

Contribution ID: **134**

Type: **not specified**

Discussion

Wednesday, 25 September 2013 12:40 (20 minutes)

Presenter: PERL, Joseph (CERN)

Session Classification: Plenary session 6 - GUI / Vis / Analysis updates

Contribution ID: 135

Type: **not specified**

Vis MT, what we want long term, what we have already achieved, what we can get done in time for release 10

Tuesday, 24 September 2013 14:30 (25 minutes)

Presenter: PERL, Joseph (CERN)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 136

Type: **not specified**

Harmonizing verbosity between GUI and Vis

Tuesday, 24 September 2013 14:55 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 137

Type: **not specified**

Getting rid of abort statements. In the UI context, it's really painful to have an application that crashes. The worst use case is the case of a missing datafile. Would rather the application ask for the missing data folder. And what does abort of a thread mean in the MT case?

Tuesday, 24 September 2013 15:10 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 138

Type: **not specified**

Considering a Geant4 Configuration File where one could put information about: Macro folder, Data folder. Removing all genenv statements from Geant4

Tuesday, 24 September 2013 15:25 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 139

Type: **not specified**

Qt5. Will we support it in release 10, or should this wait?

Tuesday, 24 September 2013 15:40 (10 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 140

Type: **not specified**

Testing of Visualization. Screen captures on test202 with xwfb. Reference images

Tuesday, 24 September 2013 15:50 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 141

Type: **not specified**

OpenGL migration from verion 2.1 to 3.2. Changes, problems, performance

Tuesday, 24 September 2013 16:05 (15 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: 142

Type: **not specified**

Web driver for Geant4. Current status, possible usages and technical problems

Tuesday, 24 September 2013 16:20 (10 minutes)

Presenter: GARNIER, Laurent (LAL-IN2P3-CNRS)

Session Classification: Parallel session 3B - Visualization / GUI

Contribution ID: **143**

Type: **not specified**

Discussion

Tuesday, 24 September 2013 16:00 (30 minutes)

Session Classification: Parallel session 3A - Computing performance

Contribution ID: 144

Type: **not specified**

Tools for calculations in microdosimetry and radiobiology

Wednesday, 25 September 2013 14:45 (15 minutes)

Presenter: CORTES GIRALDO, Miguel Antonio (Depto. de Fis. Atom., Mole. y Nucl.-Universidad de Sevilla)

Session Classification: Parallel session 5B - Basic and Extended Examples

Contribution ID: **145**

Type: **not specified**

Discussion

Contribution ID: **146**

Type: **not specified**

Discussion

Contribution ID: **147**

Type: **not specified**

Discussion

Contribution ID: **148**

Type: **not specified**

Discussion

Contribution ID: **149**

Type: **not specified**

Discussion

Contribution ID: **150**

Type: **not specified**

Discussion

Contribution ID: **151**

Type: **not specified**

Discussion

Thursday, 26 September 2013 15:50 (40 minutes)

Session Classification: Parallel session 7A - New EM Validation results

Contribution ID: 152

Type: **not specified**

2014 Collaboration Meeting

Friday, 27 September 2013 12:05 (5 minutes)

Presenter: SASAKI, Takashi (High Energy Accelerator Research Organization (JP))

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