JIRA tasks update

Weeks 14 – 28 April 2015

Updated tasks

- SIM-18 – V.Uzhinskiy
  - o Improvements to Geant4 QGS model
- SIM-228 – A.Ribon
  - o Memory performance of hadron inelastic
- SIM-278 – V.Ivantchenko, M.Novak
  - o Improvements to Goudsmit-Saunderson multiple-scattering model
- SIM-381 – G.Folger
  - o Testing of Geant4 multi-threading
- SIM-433 – J.Apostolakis
  - o Address issue of particle going far outside ATLAS
- SIM-465 – G.Folger
  - o Migrate from EC to jenkins for managing nightly testing
- SIM-514 – G.Folger
  - o Create new puppet managed servers to replace quattor managed machines

New tasks

- **SIM-596** – W.Pokorski (2015/Q2)
  - Eliminate duplicated reflected volumes in G4->GDML conversion
- **SIM-597** – J.Apostolakis (10.1.May)
  - Improve robustness of G4Navigator for tracks drifting outside the current mother volume
- **SIM-598** – V.Ivantchenko (10.1.Jun)
  - Use new classes for cross sections in pre-compound model
- **SIM-599** – V.Ivantchenko (2015/Q2)
  - Fix EM Physics List documentation in the web
- **SIM-600** – V.Ivantchenko (2015/Q2)
  - Prepare EM code for 10.1 patch02

Completed tasks

- [SIM-481](#) – W.Pokorski
  - Quasi-elastic process code review and optimisation

- [SIM-588](#) – G.Cosmo
  - Ability to import and export geometrical regions in GDML

Rescheduled tasks

- **SIM-18** – V.Uzhinskiy (10.1.Apr ➜ 10.1.May)
  - Improvements to Geant4 QGS model
- **SIM-145** – G.Folger (2015/Q2 ➜ 10.1.Jul)
  - Review of the Binary cascade (BIC) hadronic model
- **SIM-147** – G.Folger (2015/Q2 ➜ 10.1.Jun)
  - Documentation for HEP hadronic use cases and physics lists
- **SIM-223** – A.Ribon (Unscheduled ➜ 2015/Q2)
  - Memory performance of Geant4 physics for showers in calorimeters
- **SIM-225** – A.Ribon (Unscheduled ➜ 2015/Q2)
  - Memory performance of gamma- and electro-nuclear physics
- **SIM-226** – A.Ribon (Unscheduled ➜ 2015/Q2)
  - Memory performance of hadronic elastic
- **SIM-228** – A.Ribon (Unscheduled ➜ 2015/Q2)
  - Memory performance of hadron inelastic
- **SIM-242** – G.Folger (2015/Q2 ➜ 10.1.Aug)
  - Study the possibility to generate a traceback in case of crash of a test
- **SIM-287** – G.Folger (2015/Q2 ➜ 10.1.Jul)
  - Investigate newly seen Energy non-conservation

Rescheduled tasks - 2

- **SIM-327** – V.Uzhinskiy (10.1.Apr ➜ 10.1.May)
  - o Add Reggeon Cascade to QGS
- **SIM-328** – V.Uzhinskiy (10.1.Apr ➜ 10.1.May)
  - o Review and improve the sampling of the kinematical properties of quarks and diquarks in QGS
- **SIM-329** – V.Uzhinskiy (10.1.Apr ➜ 10.1.May)
  - o Include Fermi motion in QGS
- **SIM-330** – V.Uzhinskiy (10.1.Apr ➜ 10.1.May)
  - o Tuning of QGS parameters
- **SIM-381** – G.Folger (2015/Q2 ➜ 10.1.May)
  - o Testing of Geant4 multi-threading
- **SIM-382** – G.Folger (2015/Q2 ➜ 10.1.May)
  - o Create test(s) to check developments are G4MT compatible
- **SIM-383** – G.Folger (2015/Q2 ➜ 10.1.May)
  - o Create test(s) to check for new static/global variables
- **SIM-386** – G.Folger (2015/Q2 ➜ 10.1.Jun)
  - o Enhance integration testing to check memory access
- **SIM-463** – G.Folger (2015/Q3 ➜ 10.1.Nov)
  - o Improve physics list documentation

Rescheduled tasks - 3

- [SIM-465](#) – G.Folger (10.1.Apr ➜ 10.1.May)
  - ○ Migrate from EC to jenkins for managing nightly testing
- [SIM-553](#) – G.Folger (2015/Q2 ➜ 10.1.Jul)
  - ○ Check for unending loops - physics-lists
- [SIM-578](#) – G.Folger (2015/Q2 ➜ 10.1.Aug)
  - ○ Check for unending loops - Binary cascade/RPG
- [SIM-583](#) – G.Folger (2015/Q2 ➜ 10.1.Oct)
  - ○ Check for unending loops - theo/im_r_matrix/management
- [SIM-514](#) – G.Folger (Unscheduled ➜ 10.1.May)
  - ○ Create new puppet managed servers to replace quattor managed machines
- [SIM-593](#) – G.Folger (2015/Q3 ➜ 10.1.Sep)
  - ○ Web migration: G4 Tags database and Web Interface
- [SIM-594](#) – G.Folger (2015/Q3 ➜ 10.1.Sep)
  - ○ G4 web migration: mirror of web site