JIRA tasks update

Weeks 10 December 2019 – 3 March 2020

Updated tasks

- [SIM-366](#) – A.Ribon
  - Grid validation of Geant4

- [SIM-768](#) – J.Apostolakis
  - Reversed points when advancing integration during field propagation

New tasks

- [SIM-771](#) – A.Ribon (10.6-Jun)
  - Find a solution to the problem of missing decay channels for heavy hadrons in Geant4

- [SIM-772](#) – A.Ribon (10.6-Jun)
  - Include heavy hadron nuclear inelastic interactions in physics lists

- [SIM-773](#) – V.Ivantchenko (10.6-Mar)
  - Move EM testing suite location at EOS in the right place

- [SIM-774](#) – V.Ivantchenko (10.6-Mar)
  - Destruction of physics end of run

- [SIM-775](#) – V.Ivantchenko (10.6-Apr)
  - New G4PARTICLEXS3.0 dataset

Rescheduled tasks

- **SIM-607** – J.Apostolakis (10.5.Dec ↦ 10.6.Mar)
  - Check Fatras use of Geant4 Hadronic Interaction as 'Generator'
- **SIM-608** – J.Apostolakis (10.5.Dec ↦ 10.6.Jun)
  - Improve behaviour of propagation in electric field for stopping particles
- **SIM-617** – J.Apostolakis (10.5.Dec ↦ 10.6.Mar)
  - Refine IntersectionLocator which includes a check mode
- **SIM-687** – J.Apostolakis (10.6.Jan ↦ 10.6.Mar)
  - Extend testing of EM shower shape with more realistic geometries and more angles
- **SIM-690** – J.Apostolakis (10.6.Jan ↦ 10.6.Mar)
  - Create realistic setup for testing of EM showers in ATLAS EM-Barrel geometry
- **SIM-710** – A.Ribon (10.5.Dec ↦ 10.6.Dec)
  - Hadron elastic : development, validation, integration in physics lists, and effects on hadronic showers
- **SIM-711** – A.Ribon (10.5.Dec ↦ 10.6.Dec)
  - Hadronic string models : development, code improvements, validation and impact on hadronic showers
- **SIM-716** – A.Ribon (10.5.Dec ↦ 10.6.Dec)
  - Compare EPOS with Geant4 hadronic string models

Rescheduled tasks - 2

- [SIM-735](#) – G.Folger (10.6.Feb ↦ 10.6.Mar)
  - Start looking into Drupal 8
- [SIM-736](#) – G.Folger (10.5.Dec ↦ Unscheduled)
  - Develop pipeline Jenkins job to trigger Continuous builds
- [SIM-743](#) – M.Novak (10.5.Dec ↦ 10.6.Jul)
  - Introduction of detailed test of stepping for EM calorimeters triggered by ATLAS
- [SIM-747](#) – M.Novak (10.5.Dec ↦ 10.6.Dec)
  - Further tuning anOptimisation of options for the Goudsmit-Saunderson model for HEP applications
- [SIM-748](#) – M.Novak (10.5.Dec ↦ 10.6.Jul)
  - New single scattering model for e+- based on ELSEPA (numerical Dirac-Fock PWA)
- [SIM-751](#) – V.Ivantchenko (10.6.Feb ↦ 10.6.Apr)
  - Evaluate new ion ionisation models for moderate and high energies
- [SIM-757](#) – V.Ivantchenko (10.6.Feb ↦ 10.6.May)
  - New GEM model
- [SIM-760](#) – G.Folger (10.5.Dec ↦ 10.6.Mar)
  - Migrate to new Jenkins server
- [SIM-768](#) – J.Apostolakis (10.6.Jan ↦ 10.6.Mar)
  - Reversed points when advancing integration during field propagation