

JIRA tasks update

Weeks 12 June – 21 August 2018

Updated tasks

- [SIM-366](#) – A.Ribon
 - Grid validation of Geant4
- [SIM-607](#) – J.Apostolakis
 - Check Fatras use of Geant4 Hadronic Interaction as 'Generator'
- [SIM-688](#) – V.Ivantchenko
 - Systematise the monitoring of energy deposition in descriptions of ATLAS TileCal
- [SIM-708](#) – V.Ivantchenko
 - Positron annihilation to 3 gamma
- [SIM-711](#) – A.Ribon
 - Hadronic string models : development, code improvements, validation and impact on hadronic showers
- [SIM-715](#) – A.Ribon
 - Geant4 interface to (Fortran) EPOS hadronic generator
- [SIM-721](#) – J.Apostolakis
 - Improve handling of particles which take a large number of integration iterations in tracking in a magnetic field

Completed tasks

- [SIM-641](#) – G.Folger
 - Install on CVMFS the needed versions of Geant4 for the Grid production
- [SIM-697](#) – J.Apostolakis
 - Examine G4AtlasRK4 to ensure correct momentum and field value
- [SIM-701](#) – V.Ivantchenko
 - Review and improvement of the Seltzer-Berger model
- [SIM-714](#) – A.Ribon
 - Geant4 hadronics for very heavy targets
- [SIM-717](#) – A.Ribon
 - Light-ion production by ~1 GeV pion interactions in the beam-pipe and Tracker
- [SIM-720](#) – G.Folger
 - zlib in geant4/source/externals

New tasks

- [SIM-722](#) – G.Folger (10.4.Dec)
 - Reduce/remove the use of AFS for installations, web, dev tools, etc...
- [SIM-723](#) – G.Folger (10.4.Oct)
 - Use of dataset from AFS
- [SIM-724](#) – G.Folger (10.4.Dec)
 - Migrate web tools on geant4-tools.web.cern.ch OFF of AFS
- [SIM-725](#) – G.Folger (10.4.Sep)
 - Migrate integration testing to co-work with gitlab
- [SIM-726](#) – G.Folger (10.4.Aug)
 - Continuous (CI) testing of merge requests
- [SIM-727](#) – G.Folger (10.4.Sep)
 - Revise G4 setup scripts to follow general SFT style
- [SIM-728](#) – A.Ribon (10.4.Oct)
 - Set/Get the upper energy limit of Geant4 hadronic physics

Rescheduled tasks

- [SIM-374](#) – J.Apostolakis (10.4.Jun → 10.4.Aug)
 - Study possibility to change position of charged particle by multiple scattering process AlongStep
- [SIM-590](#) – J.Apostolakis (10.4.Jun → Unscheduled)
 - Create class which can be used to sample any Geant4 process
- [SIM-607](#) – J.Apostolakis (10.4.Jul → 10.4.Sep)
 - Check Fatras use of Geant4 Hadronic Interaction as 'Generator'
- [SIM-608](#) – J.Apostolakis (10.4.Jun → 10.4.Sep)
 - Improve behaviour of propagation in electric field for stopping particles
- [SIM-617](#) – J.Apostolakis (10.4.Jun → 10.4.Dec)
 - Refine IntersectionLocator which includes a check mode
- [SIM-655](#) – J.Apostolakis (10.4.Jun → 10.4.Dec)
 - Integrate improved and higher order steppers into Geant4
- [SIM-659](#) – J.Apostolakis (10.4.Jun → 10.4.Oct)
 - Use interpolation, when available, in Integration Driver
- [SIM-687](#) – J.Apostolakis (10.4.Jun → 10.4.Oct)
 - Extend testing of EM shower shape with more realistic geometries and more angles

Rescheduled tasks - 2

- [SIM-690](#) – J.Apostolakis (10.4.Jun ⇨ 10.4.Sep)
 - Create realistic setup for testing of EM showers in ATLAS EM-Barrel geometry
- [SIM-705](#) – V.Ivantchenko (10.4.Jul ⇨ 10.4.Aug)
 - Implement photo-effect model parameterisations based on new EPICS2017 data
- [SIM-708](#) – V.Ivantchenko (10.4.Aug ⇨ 10.4.Sep)
 - Positron annihilation to 3 gamma
- [SIM-719](#) – V.Ivantchenko (10.4.Jun ⇨ 10.4.Sep)
 - Review list of Geant4 particles and add EM physics to all
- [SIM-721](#) – J.Apostolakis (10.4.Jul ⇨ 10.4.Oct)
 - Improve handling of particles which take a large number of integration iterations in tracking in a magnetic field