JIRA tasks update

Weeks 12 December 2023 – 14 May 2024

Updated tasks

- [SIM-366](#) – A.Ribon
  - Grid validation of Geant4
- [SIM-690](#) – L.Pezzotti
  - Create realistic setup for testing of EM showers in ATLAS EM-Barrel geometry

New tasks

- [SIM-827](#) – V.Ivantchenko (11.2-May)
  - o Update MT initialisation of EM physics
- [SIM-828](#) – V.Ivantchenko (11.2-Jul)
  - o Migration of EM testing suite to AlmaLinux9 and Python3
- [SIM-829](#) – V.Ivantchenko (11.2-Oct)
  - o Development of a new 5D angular generator for e+e- pair production
- [SIM-830](#) – V.Ivantchenko (11.2-May)
  - o Include 3-gamma annihilation model into Geant4 Physics List
- [SIM-831](#) – V.Ivantchenko (11.2-Jun)
  - o Design an interface allowing transport and decay of positronium

Rescheduled tasks

- [SIM-687](#) – L.Pezzotti (11.1-Dec ↦ 11.2-Jun)
  - Extend testing of EM shower shape with more realistic geometries and more angles
- [SIM-690](#) – L.Pezzotti (11.1-Dec ↦ 11.2-Jun)
  - Create realistic setup for testing of EM showers in ATLAS EM-Barrel geometry
- [SIM-710](#) – A.Ribon (11.1-Dec ↦ 11.2-Dec)
  - Hadronic string models : development, code improvements, validation and impact on hadronic showers
- [SIM-711](#) – A.Ribon (11.1-Dec ↦ 11.2-Dec)
  - Hadron elastic : development, validation, integration in physics lists, and effects on hadronic showers
- [SIM-757](#) – V.Ivantchenko (11.2-Jan ↦ 11.2-May)
  - New GEM model
- [SIM-816](#) – V.Ivantchenko (11.2-Feb ↦ 11.2-May)
  - Introduction of EPICS2017 cross-sections as an option for standard gamma models