Review of Open Problem Reports

Geometry WG

Transportation & Navigation

- [#2047](#2047)
  - *The particles stop in world volume by G4UserSpecialCuts process without depositing their kinetic energy*
  - Particles by a special cuts process are stopped, when a particle kinetic energy goes beyond the energy limit (as in G4UserLimits), without depositing the remaining kinetic energy. This happens when the special cuts process is invoked in the world volume. A patch is provided reproducing the problem with the basic B4a example. K.Amako believes the problem is in the Transportation when trying to transport a particle with zero step length. Last reply: April 2018

Magnetic field

- **[#2137](#)**
  - *hstep=0 Error in G4MagInt_Driver::AccurateAdvance*
  - When generating particle gun of 1GeV muons in Belle II software framework, these errors are being produced:

    `[ERROR] In G4MagInt_Driver::AccurateAdvance(),`

    `GeomField1001: Proposed step is zero; hstep = 0`

    The problem is reported to happen with release 10.1.

    No feedback from user since 2021. To close?? Last reply: December 2021

- **[#2505](#)**
  - *Crash in CMS production with Geant4 10.7.p02*
  - Failure in `G4MultiLevelLocator::EstimateIntersectionPoint()` in advancing propagation and leading to a proposed negative step and event abortion in `G4IntegrationDriver::AccurateAdvance()`
  - Under investigation. Last reply: August 2022