

INTRODUCTION AND NEWS

LCG Physics Validation Meeting -
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Geant 4

News

- 📌 Patches for both 9.2 and 9.3 series are being prepared in these days
 - Tentative schedule: release them by the end of the week
- 📌 See Release notes for details, here only main fixes related to physics are discussed

Patch Version: 9.2.p04

Both affect LHC production PL

models/cascade (BERTINI):

- Fix for energy non-conservation in pion-nuclear reaction on very light nuclei
- Resample interaction in the rare case when an unphysical final state is created

models/CHIPS:

- Fix for anomalous final state generated in $\gamma+A \rightarrow X$ reaction
- Catch previously un-handled exceptions produced when “CHIPOLINO” pseudo-particle is created
- In both cases: resample interaction in the rare case when an unphysical final state is created

Patch Version: 9.3.p02

- Many fixes are included, only few discussed here (related to HEP physics lists)
- Hadronics:
 - models/cascade: same fix as in 9.2.p04
 - models/CHIPS: similar fix as in 9.2.p04
 - models/parton_string/hadronization:
 - improve Lund string fragmentation, fixed E conservation for FTF
- E.m.
 - G4eBremsstrahlungModel: fixed issue in which results depended on the order of definitions of elements