

EM VALIDATION RESULTS FOR GEANT4-10-04-REF-04

V. Ivanchenko
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EM physics in 10.4ref04

■ Standard

- *New 5D gamma conversion model*
- *New ion ionisation model*
- *Urban msc model – Laszlo proposed second new parameterisation for lateral displacement, it is the default for ref-04*

■ EM physics lists

- *5D gamma conversion and new ion model are included into G4EmLowEPPPhysics constructor*
- *Livermore photo-electric model is used in Opt1, Opt2*

■ Results: <https://test-geant4-tools.web.cern.ch/test-geant4-tools/emtesting/>

- *WEB page is at EOS*
- *Results for calorimeters are different due to Urban model*