Summary of Parallel Session 7A (Documentation)

Geant4 Collaboration Meeting
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Physics List Examples (I. Hrivnacova)

- Would like more uniform approach to defining physics lists in "physics examples"
  - use modular physics lists from Geant4 builders or builders provided with the example

- Add a dedicated set of "physics list" examples
  - demonstrate all the ways to define a physics list
  - like examples/extended/hadronic/Hadr00 or tests/test38

- New examples to be coupled to documentation
  - currently no section for this in App. Dev. Guide
  - update section 2. Getting Started with Geant4 where there is no mention of a pre-packaged physics list

Documentation and Publication Comments

- It is often difficult to find information quickly in our documentation
- Physics Reference Manual is often not very helpful
  - first time reader/user is often lost
  - overall meaning of a given topic can be buried in the technical aspect
  - information is often missing
- Toolkit Developers Guide has inconsistent UML formats, colors
- Publications
  - we in Geant4 do not publish enough
  - if you have a new development, don't wait for next general paper to publish it

Work Session Results (1)

- In-code documentation
  - Mihaly has done a lot of it; will talk to Alex about automatic extraction into documentation manuals
  - problem of making source code difficult to read?
  - existing, in-code html descriptions will be converted to ReST

- G4VProcess::ProcessDescription now available
  - can accommodate dumping of text for both EM and hadronic
  - EM has models and cross sections like hadronic, but more tightly coupled
    - will use G4EmProcessManager to collect and dump text
    - hadronics will continue using G4HadronicProcessStore, but still has problem with processes like RDM

Work Session Results (2)

- Vladimir will look at using DumpHtml() (or equivalent) in physics list constructors instead of process store, etc.

- New EM code descriptions (for physics list descriptions) coming soon
  - Farah will write brief description of bremsstrahlung and pair-production
  - Mihaly will do the same for multiple scattering
  - Sebastien and Vladimir have provided names of EM model developers – they should write brief descriptions as well

- Time was spent scanning re-formatted documentation
  - please send comments to Alex


Koalas are all very nice, but …