g4tools

diff –u « since last workshop »

Main ideas

- g4tools is an automatic extraction of some code found in the softinex/inlib and namespaced "g4tools" for an embedding in Geant4.
- Pure header code. Highly portable (including iOS and Android). Easily embeddable (no "config.h" or specific build tool in the way).
- Strongly OO. No implicit management.
- Thread safe (no writable statics).
- See http://softinex.lal.in2p3.fr

What's new (in one slide)

- Revisit histo, profile internals to write/read at the root format with streamers compatible with the TH,TProfile (knowing that we handle number of entries per bin, but ROOT don't).
- Scratch head to write histos, profiles at "some" csv format; we have now something that looks ok: bins infos are csv columns, other "global" infos (dimension, title, etc...) are put in a "commented header" with one line per global info.
- Prepare the ground for "sparse histos". Code already exist in inlib but not yet in g4tools; writers/readers (in particular compatible with ROOT/THnSparse) will need a non negligible amount of work.
- "usual work" to please Coverity and nightlies ©