

Geant 4

Meeting goals

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2015 Geant4 Collaboration Meeting
FermiLab, IL, USA



NATIONAL
ACCELERATOR
LABORATORY



Meeting goals

- Strategic plan for improving version 10.0 series
 - Thread safety and usability
 - Better “integratability” with TBB, and also
 - Smoother integration of MPI and MT, in particular for merging results
 - Physics validations in particular in MT mode
 - Physics results, computing speed, memory consumption
 - Additional functionalities and enhanced features
 - E.g. More biasing options, visualization in multithreaded mode
 - Adoption of C++11
 - Guideline created. Multi-year project to achieve.
 - Testing strategy
 - Example/test/document update
 - Improvements in “visibility”
 - Publication, web-page,

Credibility

- There are still quite a many open bug reports.
 - The Steering Board is now checking every open bug report at every SB meeting.
 - Collaboration meeting is an excellent opportunity for tackling to long-standing issues.
- Please update bug report you are assigned to.
 - If you think the report should be assigned to someone else, please re-assign it. Otherwise change the status to "assigned".
 - If you have already fixed the issue, or if you have identified the report as invalid, please update the report status accordingly. Don't remain the report unattended.
- Many "good" HyperNews postings are unattended.
 - First of all, subscribe threads that are related to your WGs.
- Join the collaboration-wide efforts. Collaboration meeting is a good opportunity for joining in.
 - Testing, computing and physics performance monitoring
 - Examples, documentation, web

Plan our future

- Geant4 version 10 series is not our ultimate goal. It's a solid milestone we have made, and it's the beginning of our new era.
- We will keep improving Geant4, maintaining it and supporting our customer users for foreseeable future.
- Robust and achievable longer term strategic plan can only be made with brainstorming discussions.
- Work plan should be built.
 - New physics
 - Multi-TeV hadronic physics, neutrino physics, DNA physics/chemistry, material physics, etc.
 - New capabilities
 - Crystal structure, chemical/radical interaction
 - Kernel
 - New architecture

Let's discuss

- Face-to-face discussion is by far the best way of communication.
- Speakers, please keep your talk in time. Session chairs, please allocate enough amount of discussion time.
- Please make the best use of coffee and lunch breaks, parallel to parallel sessions, evening getting together, etc. Find every opportunity for “non-scheduled” discussions.