Core Meeting Report

- 17-20 Jan @ SLAC
- Julie, Navid, Heather, Toby, David made the trip


- Topics
  - Migration to new versions of Root, G4, Gaudi, CMT
  - How to keep up with compiler versions
  - Possibility of MAC support
  - Presentation from Riccardo on MRStudio
    - 2nd generation MRvcmt (plus line mode tools)
  - Discussion of Recon futures
  - Many side discussions

- Really nice to have everyone all together!
- Julie easily won the SAS trivia quiz
- Karen has made a web interface to create/edit meeting agenda pages
Easy Ones

Root 5.08
- Fully tested on Linux by Heather. Works. Still to test on Windows
- James will test SciTools
- Features
  - pyRoot delivered with Root windows binary too, now
  - Oracle support built in (used for SysTests)
  - MAC support
  - Fuller STL support
  - First version with new dictionary (reflex); rootcint dictionary still an option

Gaudi v18x
- Big changes in python interface
- Known to build for gcc 3.2.3
- Uses CLHEP 1.8
- Since it is an extlib, we can probably use different CLHEPs for if than rest of code if need be.
- Heather working on this
Easy Ones (cont'd)

- **CMT v1r18**
  - David has tried previous version - no problems
  - Should keep up
  - Navid is de facto owner of glastpack
    - Glastpack probably should be replaced by line-mode MRStudio
    - Has new feature “Projects” which makes it easier to work on multiple configurations in parallel

- **MRStudio**
  - ab initio, based on MRvcmt experience
  - Separate kernel from gui to allow line mode tools
  - More FRED-like in appearance
  - Ready to try in a couple of weeks

http://www.fisica.uniud.it/~glast/MRStudio/history.html
• G4 v8.0
  http://confluence.slac.stanford.edu/display/core/Moving+to+Geant4+v8.0

- Biggest problem is CLHEP
  • Will need to start using CLHEP namespace
  • Perhaps a problem for forward declarations
  • Tracy taking the lead here
    - Had to modify 33 packages to compile
    - Not running yet, but he’s probably close
- There are some small problems known, but we’re assuming patches will be available by the time we get there
- We can maintain our MScat workaround if we need to
- Would like this in well before beamtest
- I believe this has alternate hadronic models so we can look at sensitivity of backgrounds to hadronic models
Compilers

• gcc 3.4
  - We support 3.2.3
  - 3.4 ships with current linux versions (4.0 on MAC!)
  - 3.4 is more ansii compliant, but can use 3.2.3 binaries, so no need to remake extlibs
  - Navid has set up RM to build using 3.4, but glibc that goes with 3.2.3
    • Tests compiler, but not distributable
    • Will make new copy of extlibs with proper glibc so users with 3.4 can work
    • Model for future compiler migrations

• Visual Studio 2005
  - Now available – there is a free version!
  - No problems anticipated (Tracy has been trying it)
  - Will need a tag for it (we grabbed VC8 by mistake)
  - MRvcmt will need to know about it – Riccardo alerted
MAC Support

- There is desire from the Science Tools community to have MAC support
  - Recall it is BSD linux under the OSX hood
  - Strategy was to invest some effort to see how hard it is to do
  - Navid (and others) have succeeded in building the extlibs needed plus SciTools code
  - It all ran with NO code changes for the MAC
  - We do not have a FRED port yet (Navid working on it)
  - The SSC had agreed to contribute to MAC support workload
  - RM will do builds on the small KIPAC MAC cluster in the SLAC farm. Navid expects no difficulties at all there.
- In the meeting there was no sense that MAC support for GlastRelease was needed
  - However I do not like the idea of partial OS support
  - Given the SciTools success (no code mods needed) Navid will continue to acquire the extlibs needed for GR and see how that goes.
  - A side benefit of all this is renewed practice in completely rebuilding the extlibs - I’ve asked Chuck to make sure the process gets documented.
Recons Discussion

• Tracy, Bill, Eric, Heather, David, Toby

http://confluence.slac.stanford.edu/pages/viewpage.action?pageId=8912

I had to bail on this meeting for a pipeline2 discussion...

• No big issues – still some discussion needed on future path of GlastClassify and support of non-Bill CTs

• Still should have some discussion of using CTs in CalRecon to give best energy estimate to TkrRecon