

Impressions from CHEP 2012

- Talks slides at:
 - <http://www.chep2012.org/>
 - <http://indico.cern.ch/conferenceTimeTable.py?confId=149557#20120521>
 - Conference4me mobile app provided interface to conference agenda
 - Use of Twitter and blogs for first time at CHEP
- Keynote address (Glen Crawford) focused on LHC, neutrinos
 - LHC upgrades in 2017 & 2021 (10x luminosity increase)
 - Daya Bay result on large θ_{13} oscillations opens up neutrino work at FNAL
- GRID is working for cycles: each expt running 60-100k jobs per day
- Rene Brun has retired – GEANT5 underway: focus on multicore
- ROOT replacing CINT with new interpreter (cling). Will not work on windows in Root6 until LLVM does.
- LHCb has abandoned Windows support for Gaudi
- Data Preservation – DESY automatically running “system tests” in VMs waiting for failures. Then see what is involved with the fix (if a fix is possible)
- LHC is abandoning evo support for Vidyo. evo will go commercial at end of 2012.
- Power and cooling majority cost of computing now. Focus on code effy now – instr/cycle



Raw notes from Summaries

- **Grids and clouds...**
- Each LHC expt running 60-100k jobs at any time
- Alice using bit-torrent for s/w distribution. Issue is some sites block bit torrent...
- CMS looking at using ATLAS' Panda system
- HammerCloud used for stress testing grid sites
- Atlas, CMS talk on mixing single node and MPI jobs.
- Proof on demand for multi core
- ATLAS trying commercial clouds. Storage is the issue.
- Dirac on the cloud via OpenStack, OpenNebula
- There is a HepiX working group on virtualization. Tony Cass.
- ROCED, WNoDeS to virtualize cloud, allow addition of resources transparently
- LHC toolkit - Dirac, happy face, cmvfs
- **Event processing...**
- Intel threading building blocks (TBB) for multi threading, libdispatch from Apple
- Fermilab has released 'art' as a generic framework. Light version of CMS'. (ask Heather to do journal club talk on it?)
- **Software eng...**
- GOoDA, Intel Vtune for code profiling etc. apparently a Gaudi plug-in exists
- CMake is taking over from cmt
- See A.Nowak talk about hardware trends
- Find out about NoSQL. M.Lassnig.
- Expert systems to auto diagnose problems. C. Haen
- RooStats
- Browsing root files via JavaScript. B. Bellenot
- PyPy python syntax with C++ speed - R.Vitillo
- PM Grazia poster on stats toolkit. Analysis of earthquake freq. Poster. A4 lib - Google Protocol Buffers. Conv tools to root. liba4.net
- VISPA arXiv 1205.4912. <http://vispa.physik.rwth-aachen.de>

