Applications Area News

- ◆ Releases and Configurations
- ◆ Source Code Indexing
- ◆ Platforms
- ◆ Python Modules

AA meeting, 20 January 2010
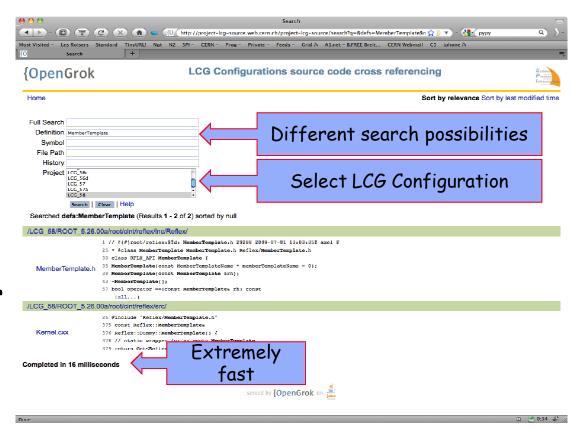P. Mato/CERN (with the help from S. Roiser)

LCG

Releases and Configurations

◆ **End-of-the-year releases**
- Geant4 9.3
    » Several physics model improvements
    » Decrease of memory footprint
- ROOT 5.26.00
    » Including major optimizations for I/O

◆ **LCG Configuration 58**
- Based on ROOT 5.26.00a, CORAL 2_3_6, COOL_2_8_5, POOL_2_9_5, RELAX_1_2_1
- To be announced today or tomorrow

Source Code Indexing (OpenGrok)

- New source code cross referencing page for AA software available at http://cern.ch/lcgsource
  - » Provides information for the last 3 LCG release series (56, 57, 58)
  - » Easy to maintain
  - » Offline (java) application for browsing available

Different search possibilities

Select LCG Configuration

Extremely fast

Platforms

◆ New compilers installed in AFS
  – gcc 4.5_20100112 (snapshot)
    » Including support for "graphite" loop optimization and link time optimization (lto)
  – llvm 2.6 (with gcc frontend)
    » Running also in the LCG nightly builds (dev2 slot)
◆ Port to Mac OSX 10.6 – Snow Leopard
  – Finishing up on porting of external packages
  – Nightly builds to be started soon

Re-organizing python modules

- ◆ Many Python add-ons requested by LHC community
- ◆ Partitioning the modules into bigger "chunks"
  - – <u>pyanalysis</u> : numpy, scipy, matplotlib
  - – <u>pygraphics</u> : pyqt(_compat), sip, pydot, pyparsing
  - – <u>pytools</u> : processing, ipython, pypy, mock, scons, 4suite, pyxml, cx_oracle, mysql_python
- ◆ Advantages:
  - – Less changes in the user configuration
  - – Shortening PYTHONPATH, LD_LIBRARY_PATH, etc.
  - – Easier integration of new modules
- ◆ Available with next LCG Configuration
- ◆ Single modules (+ CMT Interfaces) will be deprecated and removed with next-next configuration (LCG 60)