## ROOT5

#### Are you on the ROOT5 train?



# What did you miss besides the croissants?



- <u>http://agenda.cern.ch/fullAgenda.php?ida=a055638</u>
- Rene spoke about multi-core extensively..
  - Strongly encourages movement to use of TSelector rather than simple event loop.

## **Updates to Base**



#### TZipFile

- Support for zip file containing multiple sub-files.
- Autoloading
  - When referencing an unknown class
  - .rootmap provides information for mapping class to a library that needs to be loaded.
- gcc 4.0.x is supported
- Mac OS X is supported

## Integration of Reflex and Cint



- New method for introspection.
- 100% C++ code, smaller memory footprint
- Initially will be option in rootcint, ultimately the default.

#### Misc.



- MathCore new vector implementations
  - If this is the wave of the future..perhaps we consider using the same set of classes in ROOT & TDS?
  - Also includes replacement for CLHEP's random number generators.
- Double32
  - Can also store as an int with user defined number of bits for precision. Results in the possibility of higher precision than floats stored in the same amount of space.

## **PyROOT**



- No longer uses Boost since 2/2004
- Released optimized PyRoot 2/2005
- Able to start python from cint and v.v.
- Noted that from ROOT import \* is script safe but does impact performance
- Also noted that Python does not have C++ ptr arithmetic or mem management – if you use these things regularly..go back to C++
- Chapter 18 in User Guide

## PROOF: Parallel ROOT Facility



- For interactive analysis of large data sets
- Developing a test bed
  - Dedicated test farm that will improve support for those getting started with PROOF.

### THTML



- Will replace THtml completely, by end of the year
- Will allow non ClassDef'd classes
- Provide online context sensitive help
- Allows Doxygen syntax.

## **Code Style Checker**



- Currently in use in conjunction with ROOT's CVS repository.
- Contacted Federico Carminati who put us in contact with the developers
- Free Mode: where we add our rules in Java.
  We have a contact on the ROOT team who just did this.
- The RM would have to be modified to run the RuleChecker on our CVS repository