RooFit development plans for 2010

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Maintenance work on code

- Extension of to stressRooFit
  - Systematic regression test for persistence of all classes
  - Add tests to exercise recently added functionality

    (Recent Coverage results very useful, but no big surprises w.r.t.my expectations)

- Bug fixing
  - (Still waiting for Coverity results with RooFit enabled)

- Performance improvements
  - Callgrinding of stressRooFit and RooStats applications to identify performance bottlenecks (Last time as ~2 years ago, useful to repeat now that many new features were added for RooStats)

New Features

- Datasets
  - *Major (invasive) restructuring happened in 2009: now have separation of data representation (binned, unbinned etc) and storage implementation*
  - **(A)** Add new data class representing 'event count data' (empty dataset simply consisting of an event count. Easy to do, but will facilitate major simplifications of concepts, particularly in RooStats code
  - **(B)** Add new data storage class that is not TTree based
  - **(C)** Add classes that represent (filtered) subset of other datasets (link to original data, no data is copied)
- Integration
  - **(D)** Extend integration interface to accept Boolean function B(x_vec) in terms of observables that specifies integration region
- Observables
  - **(E)** Add class RooInteger. Can be conceptual extension of Roo(Abs)Category with automatic construction of labels
  - **(F)** Add plotting interface for RooCategory/RooInteger
- Task automation
  - **(G)** Finish classes RooStudyManager and RooFitGenManager to be completely functional replacement of class RooMCStudy

None of the above projects are particularly complicated (~3-5 days of work) and the're mostly independent of each other. I plan to do (A),(D) and (G) first, as these are most useful to RooStats The complete list is likely to be done by the end of the year