

Casa Core

**It's a good thing that beauty is only skin deep,
or I'd be rotten to the core.**

—Phyllis Diller

Today

- Two Branches
 - ◊ CASA – Located at NRAO
 - ◊ Googlecode
- Merging
 - ◊ As needed by NRAO and Ger (Mostly)
 - ◊ Branch divergence is often large
- Fixes and Mods for “Free”

Future

- One Repository To Rule Them All ;-)
 - Located on Google Code
 - Developers can get write access
- Module Coordinators
 - Oversee modifications to module
 - Review code quality and compatibility
 - Look at test coverage and documentation
 - Provide consulting not implementation
- Steering Committee
 - Coordinates Casacore processes and strategy

Code Evolution

- Use C++ features
 - Replace some data structures with STL equivalent.
 - Replace Regex with `std::regex`
- Improve Thread Safety
 - Implement CountedPtr with C++11's `shared_ptr`
 - Rework Measures classes that are thread-hostile
 - All statics will be mutex protected.
 - True thread-safety will not be supported

Code Evolution (cont'd)

- Table system to support Int64 columns
 - As a datatype
 - Optionally for row numbers (big data)

You Can't Get There From Here— Not!

- Policies and Mechanisms need to be put in place.
- One Last Merge
 - Short term NRAO code-freeze for casacore work.
 - Ger will merge our changes into Google code
 - When merge passes muster, CASA will alter our SVN to use Google code repository.

Pitfalls, Etc.

- Extra care about commits
- Expanded O/S support
 - Code changes may cause unexpected platform-specific problems.
 - Processes need to be in place to quickly fix/revert these problems if they occur.
 - No site is likely to have test environments for all supported platforms.