An Enabling Technology/Application Team Collaboration: Problems Solving Environment for Process Data Assimilation

**MIT:**
1. Problems with measurements taken during chemical processes.
2. Convert this to a Bayesian problem.
3. Originally written in Fortran.

**Utah:**
4. Break the Fortran problem into pieces
5. Build modules in C++ that use the Fortran routines
6. Introduce parts at the developer level
   - Each part has its own GUI. With this you can plug several instances of a part into different modules (or other parts) and each will have its own GUI in the appropriate place.
   - Parts are not modules thus they do not adhere to the data flow model and can be used internally in a loop.

5. **Part manager:** manages a collection of parts which have the same interface (i.e., each one is one particular specialization of the base part 0). The part manager lets the user switch between the parts but as for the code that refers to the manager, the manager looks like the original base part.

6. **2D Graphics:** These are new to SCIRun, allowing displays of polylines, histograms, etc.

7. **Remote GUI:** (Work in Progress)
   - Extract the GUI component from SCIRun into a separate program.
   - Enable several remote GUIs to attach to SCIRun simultaneously.