TUTORIAL S9 OUTLINE

- The Shared Address Space Programming Model
- Execution Models
- Memory View
- Consistency and Synchronization
- The UPC Programming Language
  - Background
  - Programming Model
  - Data and Pointers
  - Dynamic Memory Allocation
  - Synchronization
  - Work Sharing
  - Case Studies and Optimizations
  - Language Specifications and Current Implementations
  - Libraries
- Co-Array Fortran
  - What is Co-Array Fortran
  - Memory Model and Runtime Support
  - Syntax and Semantics
  - Synchronization and Control
  - I/O
  - Developing Codes
  - Examples
- Titanium
  - Introduction to Titanium
  - Additions to sequential Java for high sequential performance, including multidimensional arrays and unboxed objects.
  - The global memory model in Titanium and static analysis to improve performance of global pointers.
  - Design of distributed data structures using this model.
  - A region-based memory model for high performance with safety.
  - Automatic and manual optimizations of Titanium programs for clusters.
  - Applications