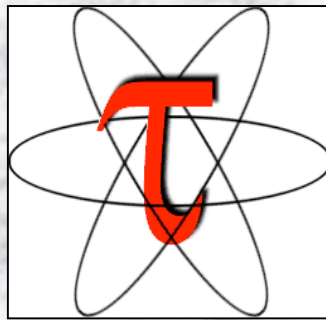


# ***TAU Parallel Performance System***

## ***PDC Summer School in HPC***



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## *Tutorial Schedule*

- Part 1 TAU overview and architecture
- Part 2 TAU components and usage
- Part 3 TAU applications

# *Tutorial Outline – Part 1*

## **TAU Overview and Architecture**

- ❑ Introduction
  - Performance technology
  - Complexity challenges and general problems
- ❑ Computation Model for Performance Technology
  - Framework for performance problem solving
- ❑ Performance analysis methods
- ❑ TAU Performance System
  - Model-oriented framework architecture
  - TAU performance system toolkit
  - TAU features, status, and application

## *Tutorial Outline – Part 2*

### **TAU Components and Usage**

- ❑ Configuration
- ❑ Instrumentation
  - Source, library, dynamic, multi-level
- ❑ Measurement
  - Profiling and tracing
- ❑ Analysis
  - ParaProf
  - Vampir
- ❑ Examples of use

## *Tutorial Goals*

- ❑ Learn about the TAU performance system
  - Configuration, instrumentation, measurement, analysis
- ❑ Understand how TAU is applied in complex parallel computation scenarios
- ❑ Develop an appreciation for performance problem solving in complex computational environments
- ❑ Meet school participants and provide opportunity for follow-on interaction
- ❑ Ask questions and have fun

# *Biographical Sketch - Allen D. Malony*

## □ Education

- B.S., 1980      University of California, Los Angeles
- M.S., 1982      University of California, Los Angeles
- Ph.D., 1991     University of Illinois, Urbana-Champaign

## □ Professional

- Senior software engineer (1986-1991), Center for Supercomputing Research and Development, UIUC
- Assistant / Associate / Full Professor (1991, 1996, 2003), Computer Science, University of Oregon

## □ Awards

- Fulbright Research Scholar (The Netherlands, Austria)  
NSF Young Investigator, von Humboldt Senior Scholar

## *Tutorial Slides*

- ❑ Slides were derived from a 1-day tutorial at the U.S. DoD User's Group Conference, 2004
- ❑ The extended set of tutorial slides can be found here
  - <ftp://ftp.cs.uoregon.edu/pub/malony/UGC2004>
  - Sections
    - intro-final.pdf
    - overview-final.pdf
    - component-final.pdf
    - application-final.pdf