











# **SC Education Summer Workshop**

# APPLICATIONS OF HPC, GRIDS, AND PARALLEL COMPUTING TO SCIENCE EDUCATION

## JUNE 15 - JUNE 21, 2008 • NAVAJO TECHNICAL COLLEGE, CROWNPOINT, NM

### What are the SC Education summer workshops?

The SC Education program provides week-long workshops in High Performance Computing (HPC) education and HPC curriculum development for faculty, administrators, and students.

## Applications of HPC, Grids, and Parallel Computing to Science Education Workshop Summary

This workshop will begin with an emphasis on parallel and cluster computing in an educational setting as well as teaching issues in Grids and Parallel Environments. Examples suitable for classroom use will be presented, including both simple codes that can be made available for student modification and more complex examples that use state of the art open source community codes.

In addition, participants will have the opportunity to be introduced to computational biology and computational chemistry tools and resources. Participants will be also be introduced to dynamic modeling, bioinformatics, simulation, molecular modeling, mathematical software and visualization viz-a-viz distributed environments and tools.

**Dates** June 15 – June 21 Location

Navajo Technical College in Crownpoint, NM

### Who is the intended audience?

The SC Education Program summer workshops are open to undergraduate and graduate educators in all fields of science, technology, engineering, mathematics, humanities, arts and social sciences, especially those from minority-serving institutions. The summer workshops are also open to high school teachers collaborating with college faculty. Faculty are encouraged to mentor and support undergraduate and graduate students by including them as part of a workshop team.

### What is the cost involved with attending?

Participants are asked to pay a registration fee of \$150 and will be required to cover their own travel expenses. Room, board, most meals, and other costs associated with the workshop are covered by the SC Education Program.

### How do I register?

Visit http://sc-education.org/workshops/ to register.

### What is the SC08 Education program?

The SC08 Education program uses hands-on based workshops to help attendees incorporate computational science and computational modeling into primarily the undergraduate curriculum. Topics may also include high performance computing and communications technologies in support of science and modeling. The intent of the curricular change is to prepare future scientists, technologists, engineers, and teachers. The program culminates in a week-long offering at the SC (Supercomputing) Conference in November.

# **Register Now: http://sc-education.org/workshops/**

# **SC Education Summer Workshops**

### Register at http://sc-education.org/workshops/

### $\rightarrow$ Applications of HPC, Grids, and Parallel Computing to Science Education

Dates	Locations
June 15 – June 21	Navajo Technical College in Crownpoint, NM
July 6 – July 12	Grand Valley State University in Allendale, MI
July 20 – July 26	NCSA Access DC in Arlington, VA
Aug 10 – Aug 16	University of Oklahoma in Norman, OK

### → Computational Biology for Biology Educators

Dates	Locations
June 2 – June 6	University of Illinois in Urbana-Champaign, IL - registration fee waived
July 13 – July 19	Houston Community College System in Houston, TX

### → Computational Chemistry for Chemistry Educators

Date	Location
June 1 – June 7	University of Puerto Rico in Rio Piedras, Puerto Rico

#### → Computational Physics and Parallel Environments

Date	Location
June 1 – June 7	Kean University in Union, NJ

### $\rightarrow$ High Performance Computing in the Humanities, Arts and Social Sciences

DateLocationJuly 27 – Aug 2University of Illinois in Urbana-Champaign, IL

### $\rightarrow$ Introduction to Modeling, Simulation, and Computational Methods

Date	Location
July 28 – July 30	Indiana University Northwest in Gary, IN – registration fee of \$75

### $\rightarrow$ Integrating Computational Science into the Undergraduate Curriculum

DateLocationJune 8 – June 14Louisiana State University in Baton Rouge, LA

### → High Performance Computing in Nano and Bio Sciences Research and Education

Dates June 22 – June 28 June 29 – July 5 Locations University of Texas in El Paso, TX CeNAT in San Jose, Costa Rica

This list is subject to change as more workshops are added. See the website at http://sc-education.org/workshops/ for up-to-date information.