PROGRAM COMPILED FOR PHYSICS COMPUTING '93

Physics Computing '93 will run from Monday, 31 May, through Friday, 4 June, in Albuquerque, New Mexico. The meeting is cosponsored by the American Physical Society's division of computational physics, *Computers in Physics* magazine and the European Physical Society. The Albuquerque Convention Center will be the site for the meeting as well as the accompanying tutorials and commercial equipment exhibit.

The topics of the meeting's technical sessions include numerical algorithms and methods, networks and databases, visualization, physics applications, language and architecture developments and computers in physics education.

The meeting's organizers have arranged for tutorials that are designed to bring attendees up-to-date on advances in the field. Topics include algorithms, computing trends, computational methods, numerical techniques such as Monte Carlo methods, programming, simulation and specific software packages. The tutorials will run on Monday, which happens to be Memorial Day.

Meeting attendees might also like to attend the opening reception on Tuesday at 6 pm in ballrooms A and B. Wednesday at 6:30 pm a reception will be held in the ballroom foyer, before the banquet at 7:30 pm in the grand ballroom.

Plenary talks

A series of plenary talks will be given throughout the week. The talks reflect the variety of physics subfields in which computers are important: interfaces, climate change, fluid dynamics done on workstation clusters, neural networks, processing data from the Cosmic Background Explorer satellite, and lattice quantum chromodynamics programs run on 1-teraflop machines. And in a special plenary session on Wednesday morning the Rahman Prize will be presented to a recipient whose name has not yet been announced. Francis Bretherton of the University of Wisconsin, Madison, will speak about climate change at the symposium.

The American Institute of Physics will run an equipment exhibit featuring products and services from leading vendors in the industry. Show hours are Tuesday, 2 pm to 8 pm; Wednesday, 10 am to 5 pm; and Thursday, 10 am to 2 pm.

Additional information about the meeting can be obtained electronically via the Internet by anonymous ftp from pinet.aip.org. The meeting information is in the directory "pc93."■

Sessions with Invited Speakers

Tuesday, 1 June

morning

Plenary session I. *Kogut, Langton*
Plenary session II. *Dill, Chen*

afternoon

Molecular dynamics I. *Rapaport, Grabow, Sinkovits*
Density functional theory. *Kleinman, Allan*
Particle simulations. *Forslund*
Turbulence. *Kraichnan, Moser, Oran*
Architectures. *Brower, Semenov*
Monte Carlo methods I. *Tamayo, Potvin*
Ab initio electronic structure. *Pindzola*
Computers and experiments. *Waters, McFarlane*
Networking. *Leighton, Roskies, Duke*

Wednesday, 2 June

morning

Plenary session III: Rahman Prize. *Bretherton*
Genetic algorithms. *Mitchell, Forrest*
Quantum Monte Carlo I. *Ceperley, Lang*
Visualization I. *Werner, Hansen, Land*
Smoothed particle hydrodynamics. *Monaghan, Benz*
Information retrieval. *Watson, Kerbel*

afternoon

Neural nets. *Softky, Hertz*
Mesoscopic physics I. *Pantelides*
Visualization II. *Bailey, Stein*
Discrete methods for PDEs I. *Shertzer, Mavriplis*
Numerical relativity. *Seidel, Choptuik, Abrahams*
Chemical dynamics. *Neuhauser, Parker*
Few-body problems. *Payne, Kouri*
Discrete methods for PDEs II. *Hyman, Wheeler*
Monte Carlo methods II. *Ferrenberg, Okabe, Batrouni*

Thursday, 3 June

morning

Plenary session IV. *Atick, Kilcup*
Chaos. *Crutchfield, Shaw*
Macromolecules. *Kumar, Plimpton*
Quantum Monte Carlo II. *Moskowitz*
Physics education I: CUPS. *Dworzecka*
Particle-in-cell methods. *Brackbill, Liewer*
Languages. *Koelbel*

afternoon

Climate. *Smith, North, McRae*
Molecular dynamics: Shocks. *White, Armstrong, Holian*
Mesoscopic physics II. *Duxbury, Kawakatsu*
Physics education II. *Kay*
Fast transforms. *Pelz, Beylkin*
Eigenvalue solvers. *Davidson, Cullum*
Lattice gauge theory. *Kronfeld, Gupta, Weingarten*
Computational fluid dynamics. *Benek, Karniadakis*
Physics education III. *Razani, Walker*
Growth and aggregation. *Wolf, Brandenburg*
Symbolic computation. *Hearn, Steinberg*

Friday, 4 June

morning

Plenary session V. *Landmann, Winkler*
Virtual reality and visualization. *Bryson, Minkoff, Silverman*
Acceleration algorithms. *Evertz, Elder*
N-body calculations. *Barnes, Evrard*
Electronic communications. *Ginsparg, Kahle, Gage*
Plasmas. *Reiman, Mikic*