



▶ **IMPORTANT DATES**

November 14, 2006
Ray Kurzweil's keynote will open the SC06 technical program

▶ **CONFERENCE**

This year the conference will take its inspiration from Albert Einstein who said, "Computers are incredibly fast, accurate, and stupid; humans are incredibly slow, inaccurate and brilliant; together they are powerful beyond imagination."

▶ **TECHNICAL PROGRAM**

[Conference Schedule](#)
[Technical Papers](#)

▶ **NEWS & PRESS**

[Famed Inventor Ray Kurzweil to Be Keynote Speaker at SC06 Conference](#)
[Interview With Barbara Horner-Miller, ARSC](#)


▶ **EXHIBITS**

Industry and research exhibits from the world's leading companies and organizations.



▶ **REGISTRATION**

Registration is open.



▶ **TRAVEL & HOTELS**

The 19th annual SC conference will convene in Tampa in November 2006.



▶ **SC06 VIDEO**

[Powerful Beyond Imagination](#)

▶ **KEYNOTE SPEAKER**

Ray Kurzweil will be the keynote speaker at this year's conference

▶ **SCDESKTOP**

SCDesktop will enable virtual attendance

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ABOUT SC06

SC06, the premier international conference on high performance computing, networking, storage and analysis, will convene in November 2006 in Tampa. This year the conference will take its inspiration from Albert Einstein who said "Computers are incredibly fast, accurate and stupid; humans are incredibly slow, inaccurate and brilliant; together they are powerful beyond imagination."

Following the traditions set with the first SC conference in 1988, exciting technical and educational programs, workshops, tutorials, exhibits, demonstrations and many other activities await attendees. SC06 is the one place where attendees can see tomorrow's technology being used to solve world-class challenge problems today.

SC06 will explore the ways in which high performance computing, networking, storage and analysis lead to advances in research, education and commerce. Innovative and diverse technologies are implemented within the HPC world every year. SC06 will introduce a new initiative focusing on those emerging concepts and technologies that have the potential to reshape the HPC landscape, add a new [Storage Challenge](#), extend the education program to support students with learning and physical disabilities, and host a [ACM Student Research Competition](#). The Analytics initiative that was introduced last year will also evolve during the SC06 planning process. The SC conference has grown substantially, with registered attendance at SC|05 approaching 10,000. This attendance provides an excellent forum for researchers to explore ideas and build collaborations.

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History



SC2005
Seattle, WA
November 12-18 2005
[Conference Proceedings](#)



SC2004
Pittsburgh, PA
November 6-12 2004
[Conference Proceedings](#)



SC2003
Phoenix, AZ
November 15-21, 2003
[Conference Proceedings](#)



SC2002
Baltimore, MD
November 16-22, 2002
[Conference Proceedings 1](#)
[Conference Proceedings 2](#)



SC2001
Denver, CO
November 10-16, 2001
[Conference Proceedings](#)



SC2000
Dallas, TX
November 4-10, 2000
[Conference Proceedings](#)



SC1999
Portland, OR
November 13-19, 1999
[Conference Proceedings](#)



SC1998
Orlando, FL
November 7-13, 1998



SC1997
San Jose, CA
November 15-21, 1997
[Conference Proceedings](#)



SC1996
Pittsburgh, PA
November 17-22, 1996
[Conference Proceedings](#)



SC1995
San Diego, CA
December 4-8, 1995
[Conference Proceedings](#)



SC1994
Washington, D.C.
November 13-18, 1994
[Conference Proceedings](#)



SC1993
Portland, OR
November 15-19, 1993
[Conference Proceedings](#)



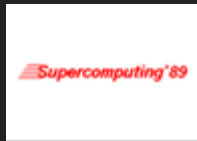
SC1992
Minneapolis, MN
November 16-20, 1992
[Conference Proceedings](#)



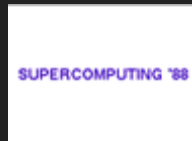
[SC1991](#)
Albuquerque, NM
November 18-22, 1991
[Conference Proceedings](#)



[SC1990](#)
New York, NY
November 12-16, 1990
[Conference Proceedings](#)



[SC1989](#)
Reno, NV
November 13-17, 1989
[Conference Proceedings](#)



[SC1988](#)
Orlando, FL
November 14-18, 1988
[Conference Proceedings](#)

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SC06 Committees

The Conference Committee meets throughout the year and manages the many aspects of the conference.

The current membership is:

CONFERENCE COMMITTEE

Conference General Chair, Barbara Horner-Miller

Arctic Region Supercomputing Center

Conference Vice Chair, Cheri Pancake
Oregon State University

Committee Support, Vivian Benton
Pittsburgh Supercomputing Center

Conference Deputy Chair, Becky Verastegui

Oak Ridge National Laboratory

Assistant Chair, Suzanne Noll
Arctic Region Supercomputing Center

INITIATIVES

Analytics Chair, Tim Leite

Visual Numerics

Exotic Technologies Chair, Bill Krame

NERSC, Lawrence Berkeley National Laboratory

Storage Challenge Chair, Ray Paden

IBM Corporation

Learning & Physical Challenges Education Chair, Zaida McCunney
NERSC, Lawrence Berkeley National Laboratory

TECHNICAL PROGRAM

Tech Program Co-Chair, Jeff Hollingsworth

University of Maryland

Invited Speakers Chair, Dona Crawford
Lawrence Livermore National Laboratory

Tech Program Co-Chair, Barb Fossum
Purdue University

Awards Chair, Sangtae Kim
Purdue University

Tech Papers Co-Chair, Dan Reed

University of North Carolina

Proceedings Chair, Janet Brown
Pittsburgh Supercomputing Center

Tech Papers Co-Chair, William Gropp

Argonne National Laboratory

Posters Co-Chair, Alan Sussman
University of Maryland

Tutorials Co-Chair, Blaise Barney
Lawrence Livermore National Laboratory

Tutorials Co-Chair, Diane Rover
Iowa State University

Panels Chair, Jack Dongarra
University of Tennessee

Panels Vice Chair, David Walker
Cardiff University

Birds-of-a-Feather Chair, Pete Wilson
Sandia National Laboratories

MasterWorks Chair, Jose Munoz
National Science Foundation

MasterWorks Vice Chair, Jeff Kuehn
Oak Ridge National Laboratory

Posters Co-Chair, Jeffrey Evans
Purdue University

Workshop Chair, Mary Thomas
San Diego State University

Workshop Vice Chair, Radha Nandkumar
National Center for Supercomputing Applications

Challenges Coordinator, Karen Karavanic
Portland State University

Communications Liaison, Harvey Wasserman
Lawrence Berkeley National Laboratory

EXHIBITS

Exhibits Chair, Tim Jones
Oak Ridge National Laboratory

Research Exhibits Chair, Kevin Wohlever
OSC

Industry Exhibits Chair, Valerie Thomas
High Performance Computing
Modernization Program

Exhibitor Forum Chair, Chuck Koelbel
Rice University

Exhibits Contact & Liaison, Dave Cooper
Lawrence Livermore National Laboratory

Exhibits Contractor, Peter Erickson
Hall-Erickson Inc.

Exhibits Contractor, Mike Weil
Hall-Erickson Inc.

Exhibits Contractor, Paul Graller
Hall-Erickson Inc.

Decorating Contractor, Darryl Monahan
Freeman Companies

SCinet

SCinet Chair, Dennis Duke
Florida State University

Vice Chair, Jeff Mauth
Pacific Northwest National Laboratory

Deputy Chair, Jackie Kern
National Center for Supercomputing Applications

Power, Bill Wing
Oak Ridge National Laboratory

Routing, Linda Winkler
Argonne National Laboratory

Network Security, Bill Nickless
Pacific Northwest National Laboratory

WAN Transport, Dave Pokorney

Architecture, Tracey Wilson
Computer Sciences Corporation

Fiber, Mitch Kutzko
Pacific Northwest National Laboratory

Equipment Co-Chair, Denny Rice
Los Alamos National Laboratory

Equipment Co-Chair, Patrick Dorn
National Center for Supercomputing
Applications

Logistics, Ralph McEldowney
Air Force Aeronautical Systems Center

IP Services, Rex Duncan
Oak Ridge National Laboratory

IT Services Co-Chair, Casey Deccio
Sandia National Laboratories

IT Services Co-Chair, Davey Wheeler
National Center for Supercomputer
Applications

Measurement, Matt Zekauskas
Internet2

Florida LambdaRail

Wireless, Jamie Van Randwyk
Sandia National Laboratories

Xnet Co-Chair, Paul Love
Internet Consulting of Vermont

Xnet Co-Chair, Rod Wilson
Nortel

Helpdesk, Doug Luce
Aaronsen Group

Bandwidth Challenge, Debbie Montan
Force10 Networks

InfoStar Co-Chair, Bob Borchers
Maui High Performance Computing Center

InfoStar Co-Chair, Bob Baddeley
Pacific Northwest National Laboratory

Open Infiniband, Bill Boas
Systemfabricworks

Physical Security, Doug Gatchell
National Science Foundation

INFRASTRUCTURE

Infrastructure Co-Chair, Barry Hess
Sandia National Laboratories

Infrastructure Co-Chair, Jim Ferguson
National Center for Supercomputing
Applications

**Local Arrangements Contractor, Mary
Amiot**
Northstar Events Management, Inc.

Housing, Gina Morello
NASA Ames Research Center

Catering Contractor, Jan Hull
Contractor

Electrical, Gary New
National Center for Atmospheric Research

Space, Eric Sills
North Carolina State University

Security Chair, Jim Costa

AV & PCs, Jackie Kern
National Center for Supercomputer
Applications

Signage, Janet McCord
Texas Advanced Computing Center

**Conference Office, Margaret
Greenwade**
YAGG

**Student Volunteers Co-Chair, Jennifer
Teig von Hoffman**
Boston University

**Student Volunteers Co-Chair, Deborah
Schwartz**
NAVAIR Aircraft Division

Internet Services, Matt Link
Indiana University

Photography, Barbara Kucera
University of Kentucky

Lawrence Livermore National Laboratory

**Security Vice Chair, Trish Larson
Damkroger**

Lawrence Livermore National Laboratory

Webmaster, Virginia Bedford

Arctic Region Supercomputing Center

COMMUNICATIONS

Communications Chair, Wilfred Pinfold

Intel Corporation

Program Co-Chair, Dixie Milliken

Intel Corporation

**Assistant to the Communications
Chair, Amy Shetterly**

Intel Corporation

Program Co-Chair, Mary-Ellen Pinfold

**Web and collateral, Branwynne
Kennedy**

Producer, Ultra 16 Inc.

Media Relations, Karen Green

Renaissance Computing Institute

Mailing List, Ray and Gayle Elliott

Press Releases, Jon Bashor

Lawrence Berkeley National Laboratory

**Technical Program Liaison, Harvey
Wasserman**

Lawrence Berkeley National Laboratory

International Relations, Tim Little

High End Computing Marketing Services

Press Room, Betsy Riley

Oak Ridge National Laboratory

Newsletter, Kathryn Kelley

OSC

FINANCE

Finance Co-Chair, Pat Teller

University of Texas at El Paso

**Registration Co-Chair, Kathy
Turnbeaugh**

Lawrence Livermore National Laboratory

Finance Co-Chair, Jim McGraw

Lawrence Livermore National Laboratory

Store Co-Chair, Gloria Montoya-Rivera

Los Alamos National Laboratory

Finance Contractor, Karin MacBride

Talley Management Group, Inc.

Store Co-Chair, Corrine Fresquez

Los Alamos National Laboratory

Registration Contractor, Chris Jensen

ExpoExchange, Inc.

Registration Co-Chair, Michele Gunn

Lawrence Livermore National Laboratory

EDUCATION

Education Co-Chair, Krishna Madhavan
Purdue University

Education Co-Chair, Gary Bertoline
Purdue University

Minority Outreach Program, Valerie B Thomas

Department of Defense High Performance
Computing Modernization Program

Alson Been
Bethune-Cookman College

SCGLOBAL

SCGlobal Chair, Ron Rankine
Ryerson University

Technical Producer, Many Ayromlou
Ryerson University

Technical Director, Jim Miller
inSORS Integrated Communications

Showcase Producer, Cindy Sievers
Los Alamos National Laboratory

SCinet Coordinator, Jaffery Richard Schwab
Purdue University

SCDesktop Producer, Paul Mercer
Arctic Region Supercomputing Center

Communications Coordinator, John I Quebedeaux Jr
Louisiana State University

Remote Sites Manager(USA), John W Langkals
Ohio State University

Remote Sites Manager(Canada), Brian Corrie
Simon Fraser University

Remote Sites Manager(Europe), Paul Joseph Kuchar
University of Manchester

Remote Sites Manager(Asia/Pacific), Jason Bell
Central Queensland University

Student Volunteers, Julie Mullen
Solidus Technical Solutions



History

SC06 Committees

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Technical Program Committees

Submissions of technical papers were evaluated by members of the Technical Program Committee listed below.

Tech Program Co-Chairs:

Barb Fossum, Purdue University

Jeff Hollingsworth, University of Maryland

Tech Paper Co-Chairs:

William Gropp, Argonne National Laboratory

Dan Reed, University of North Carolina

PAPERS AREAS

Networks:

Wu Feng (Chair), Virginia Tech

Alan Benner, IBM

Ada Gavrilovska, Georgia Institute of Technology

Patrick Geoffrey, Myricom

Jason Leigh, University of Illinois at Chicago

Xiaosong Ma, North Carolina State University

Jarek Nieplocha, Pacific Northwest National Laboratory

Vivek Pai, Princeton University

Dhableswar Panda, Ohio State University

Injong Rhee, North Carolina State University

Scott Rixner, Rice University

Martin Swany, University of Delaware

Keith Underwood, Sandia National Laboratories

Peter Varman, Rice University

Malathi Veeraraghavan, University of Virginia

Peter Wyckoff, OSC

Dongyan Xu, Purdue University

System Software:

Applications:

Ricky Kendall (Chair), Oak Ridge National Laboratory

Ray Bair, Argonne National Laboratory

Alan Benner, IBM

Andrew Canning, Lawrence Berkeley National Laboratory

Kenneth Chiu, SUNY Binghamton

Steve Elbert, Pacific Northwest National Laboratory

John Feo, Cray Inc.

Doug Fuller, University of North Texas

Robert Harrison, Oak Ridge National Laboratory

Fred Johnson, US Department of Energy

Jeff Kuehn, Oak Ridge National Laboratory

Brian Smith, IBM

Nahil Sobh, National Center for Supercomputing Applications

Eric Stahlberg, OSC

Arnold Tharrington, Oak Ridge National Laboratory

Matt Wolf, Georgia Institute of Technology

Grids:

Dennis Gannon (Chair), Indiana

Karsten Schwan (Chair), Georgia Institute of Technology
Guillermo Alvarez, IBM Almaden
Peter Dinda, Northwestern
Greg Eisenhauer, Georgia Institute of Technology
Garth Gibson, Carnegie Mellon University
Orran Krieger, IBM Watson
Mario Lauria, Ohio State
Walter Ligon, Clemson
David Lowenthal, University of Georgia
Arthur Maccabe, University of New Mexico
Pankaj Mehra, HP Laboratories
David O'Hallaron, Carnegie Mellon University
Fabrizio Petrini, Pacific Northwest National Laboratory
Jeffrey Vetter, Oak Ridge National Laboratory

Performance:
Barton Miller (Chair), University of Wisconsin
David Abramson, Monash University
Elisa Heymann, University Autònoma de Barcelona
Adolfy Hoisie, Los Alamos National Laboratory
Marty Itzkowitz, Sun Microsystems
Shirley Moore, University of Tennessee
Philip Roth, Oak Ridge National Laboratory
Bronis R. de Supinski, Lawrence Livermore National Laboratory
Roland Wismüller, Universität Siegen
Rich Wolski, University of California, Santa Barbara
Patrick Worley, Oak Ridge National Laboratory

University
David Bader, Georgia Institute of Technology
Mark Baker, University of Portsmouth
Rajkumar Buyya, University of Melbourne
Frank Cappelo, Institut National de Recherche en Informatique
Ann Chervenak, University of Southern California/ISI
Frederic Desprez, Institut National de Recherche en Informatique
Thomas Fahringer, University of Innsbruck
M. Govindaraju, Binghamton University
Thomas Hacker, Indiana University
Adriana Iamnitchi, University of South Florida
Thilo Kielmann, Vrije Universiteit
Laurent Lefevre, Institut National de Recherche en Informatique
Paul Lu, University of Alberta
Reagan Moore, San Diego Supercomputer Center
Manish Parashar, Rutgers University
Beth Plale, Indiana University
Viktor Prasanna, University of Southern California
Thomas Rauber, University of Bayreuth
Erich Schikuta, University of Vienna
Jennifer Schopf, Argonne National Laboratory
Sudharshan Vazhkudai, Oak Ridge National Laboratory
Cho-Li Wang, University of Hong Kong
Jon Weissman, University of Minnesota
Zhiwei Xu, Chinese Academy of Sciences
Albert Zomaya, University of Sydney

Architecture:
Marc Snir (Chair), University of Illinois at Urbana-Champaign
Matthias Blumrich, IBM
Sanjeev Kumar, Intel Corporation
Trevor Mudge, University of Michigan
Jose L. Munoz, National Science Foundation
Hugo Patterson, Data Domain
Li-Shuan Peh, Princeton University
Yuanyuan Zhou, University of Illinois at Urbana-Champaign

TUTORIALS COMMITTEE

Blaise Barney (Co-Chair), Lawrence Livermore National Laboratory
Diane Rover (Co-Chair), Iowa State University
Ioana Banicescu, Mississippi State University
John Cobb, Oak Ridge National Laboratory
Candy Culhane, National Security Agency
Timothy Davis, University of Florida
Jack Dongarra, University of Tennessee
Alan Edelman, Massachusetts Institute of Technology
Don Frederick, San Diego Supercomputer Center
Lee Higbie, Arctic Region Supercomputing Center
Keith Jackson, Lawrence Berkeley National Laboratory
Fred Johnson, Department of Energy

Eileen Kraemer, University of Georgia
Bruce Loftis, Purdue University
Glenn Luecke, Iowa State University
Ray Paden, IBM
Padma Raghavan, Penn State University
John Sopka, High Performance Systems Software
Leslie Southern, Ohio Supercomputer Center
Lauren Smith, National Security Agency
Xian-He Sun, Illinois Institute of Technology
Mary Thompson, Lawrence Berkeley National Laboratory
John Towns, National Center for Supercomputing Applications
Frank van Lingen, California Institute of Technology
Trey White, Oak Ridge National Laboratory
Nancy Wilkins-Diehr, San Diego Supercomputer Center

WORKSHOP COMMITTEE

Workshop Chair, Mary Thomas
San Diego State University

Workshop Vice-Chair, Radha Nandkumar
National Center for Supercomputing Applications

Robert Allan, Daresbury Laboratory, UK
Mark Baker, ACET, University of Reading, UK
Jose Castillo, San Diego State University, USA
Walfredo Cirne, University of Campina Grande, Brazil

John Cobb, Oak Ridge National Laboratory
Dan Fay, Microsoft
Geoffrey Fox, Indiana University
Keith Jackson, Lawrence Berkeley National Laboratory
Craig Lee, Aerospace Corporation
Malika Mahoui, Indiana University School of Informatics
Jarek Nabrzyski, Poznan Poland
Todd Needham, Microsoft
Jun Ni, University of Iowa
Frank von Lingen, California Institute of Technology
Nancy Wilkins-Diehr, San Diego Supercomputer Center



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Steering Committee

The Steering Committee meets three times a year to set the future course of the conference and to address issues and policies that cross multiple years of the conference. The committee changes membership with the January meeting and is chaired by the immediate past Conference General Chair. Other members of the committee include the next 3 upcoming general chairs, society liaisons and elected members serving 4-year terms.

The current membership is:

Chair, William Kramer
NERSC, Lawrence Berkeley National
Laboratory

Donna Baglio
ACM

Rajkumar Buyya
IEEE Computer Society

Dona Crawford
Lawrence Livermore National Laboratory

John Grosh
Lawrence Livermore National Laboratory

Barbara Horner-Miller
Arctic Region Supercomputing Center

Fred Johnson
Department of Energy

David Kaeli
IEEE Computer Society

Anne Marie Kelly
IEEE Computer Society

Chuck Koelbel
Rice University

Scott Lathrop
TeraGrid - University of Chicago/Argonne
National Laboratory

George Michael
Emeritus

Jim Rogers
Computer Sciences Corporation

Rob Schreiber
ACM-SIGARCH

Burton Smith
Microsoft

Pat Teller,
University of Texas, El Paso

Becky Verastegui
Oak Ridge National Laboratory

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Advisory Committee

The Industry Advisory Committee provides the SC Conference General Chair with a sounding board for and source of, new ideas for the conference that are of interest to this segment of the attendees. Members represent a cross-section of the conference's industry exhibitors, small and large vendors in different technology areas.

The current membership is:

Chair, Barbara Horner-Miller
Arctic Region Supercomputing Center

Ben Passarelli
Linux Networx

Donna Baglio
ACM

Steve Perrenod
eXludus

Mike Bernhardt
HPCWire

Michelle Holley
Intel

Rich Brueckner
Sun Microsystems

Ellen Roder
Cray Inc.

Wes Kaplow
Qwest

Jim Rogers
Computer Sciences Corporation

Ann Marie Kelly
IEEE Computer Society

Susan Tellep
SGI

Phil Fraher
Visual Numerics

Pat Teller
University of Texas, El Paso

George Funk
Dell

Bruce Toal
Hewlett-Packard Company

Graham Holmes
Cisco Systems

Ed Turkel
Hewlett-Packard Company

Doug Lora
Microsoft

Becky Verastegui
Oak Ridge National Laboratory

Tom Nelson
StorageTek

Jeff Verrant
CIENA

Ray Paden
IBM

Christopher Willard
IDC



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Minority Outreach

[Submissions Now Open](#)

Award Notification

September 4, 2006

Submissions Due

August 25, 2006

[Questions](#)

Program Overview

The Minority Outreach Program within the SC (Supercomputing Conference) offers a unique opportunity for underrepresented groups to witness and directly participate in the discovery of advancements being made in the high performance computing environment. The SC, with its global reach and innovative approach, is the perfect venue for this to occur. At this conference, traditionally underrepresented groups have the opportunity to exchange knowledge and skills with each other and with the broader community about their techniques and processes used to exploit and support these advanced technologies. Access to state of the art equipment and demonstrations provide a first-hand exclusive opportunity for the participants that may not be available otherwise. The Minority Outreach Program within the overall context of the Conference allows for a more diverse community to attend the conference and to gain access to technical discussions, panel debates on best practices, and other critical resources that potentially provide a competitive advantage for others when developing products and services for their respective markets and communities. Ensuring representation by specifically funding underrepresented groups of individuals demonstrates social responsibility by the ACM and the IEEE in providing mainstream access of high performance computing and information technology advancements to this community.

IEEE and ACM have funded the SC Minority Outreach Program since its inception in 2000. The intended impact of this program goes beyond increasing the number of minority participants in the SC conference. It allows for the fostering of collaborative relationships between faculty, IT professionals, students at minority serving institutes (MSIs), and research scientists at major research centers, as well as impacting the amount and quality of computational science education at MSIs.

Through the Minority Outreach Program selected grant recipients will be invited to participate in either the Tutorials Program or the Technical program. In addition to the complementary conference registration, grant recipients will be reimbursed for their SC expenses for lodging and transportation, up to an agreed upon amount.

Grant Application Process

To apply candidates should complete and submit the [SC Minority Outreach Program Grant Application Form](#) by August 25, 2006. Applicants will be notified of their acceptance via e-mail by September 4, 2006. Awards will be made until all slots are filled.

Selection Criteria

The SC Minority Outreach Program will select up to 40 participants.

To be considered for funding, applicants:

- Must be a minority faculty, IT professional, or student;
- Must be either a US citizen or permanent resident; and
- Must be able to showcase a research project or give a poster presentation in the Minority Outreach Program's Research Booth

In addition, grant recipients are expected to participate in scheduled booth activities, develop a presentation to share their SC experience with their colleagues at their home institutions; and complete an evaluation survey of the Minority Outreach Program.

Applicants that have not previously participated in the SC will be given first priority for funding. Those that have been funded more than three times will not be considered.

Financing Participants

The Minority Outreach Program will fund up to 40 participants in the amount of \$1,500 each to attend the SC. Individual reimbursements will cover the cost of travel and lodging up to the amount of \$1,500. Expenses exceeding \$1,500 will not be reimbursed and will be the responsibility of the participant or their institution. In addition to the reimbursement, participants will be given a complementary SC registration for either the Technical Program or the Tutorials Program. The Tutorial Program participants will also receive a pass to the SC Exhibits Hall. The grant award is non-transferable.

Travel to and from the conference is to be conducted at the least overall cost to the conference. Only airfare less than or equal to domestic coach fare will be reimbursed, to a maximum of \$600. Advance purchase tickets should be used where there is a substantial cost savings and the risk of cancellation penalties is not severe. (In some cases there may be a significant savings on airfare fares by staying over a Saturday night. In order to be reimbursable, the overall cost savings must be greater than the least expensive airfare without the Saturday night stay plus the hotel expenses incurred due the additional nights. The Minority Outreach Program Chair must approve this option at least two weeks prior to travel. Documentation of the savings must accompany the reimbursement request.)

If the traveler elects to drive to the conference, reimbursement will be limited to the lesser of coach airfare, or hotel parking expenses plus \$0.405/mile. This option will be permitted only if the approval is obtained at least two weeks prior to travel. Documentation of the savings must accompany the reimbursement request.

Travelers are also expected to use cost effective methods of ground transportation. Car rentals are not reimbursable. Travel between your residence/work and the airport will be reimbursed at \$0.405/mile. Travelers will be reimbursed for reasonable costs for local transportation, which includes taxi, shuttle, bus, and train expenses (whenever available, airport shuttles should be used). Long-term airport parking fees will be reimbursed.

Travelers will receive \$54.00 per day to cover all meals and incidental expenses in Tampa. The Per Diem will be reduced when meals are provided by the conference, even if the traveler elects not to eat them. The Tampa reduction will be \$26 for dinner, \$15 for lunch and \$10 for breakfast.

A block of rooms will be reserved specifically for the Minority Outreach Program participants at a conference hotel. A deadline will be established for room reservations; after this date, hotel reservations must be made using the SC06 on-line housing reservation system on the SC06 website. Conference rates will not be given to participant

who contact hotels directly. Rooms in the Minority Outreach Program block, which, can be booked for a maximum of seven nights (single occupancy), will be billed directly to the Minority Outreach Program master account. For those participants who choose to stay at other hotels, a maximum of seven nights lodging expenses will be reimbursed, with the per-night lodging expense limited to the cost of a single-occupancy room at the designated hotel.

Each program participant will receive a complimentary registration for either the Tutorials or the Technical Program. Individuals wishing to attend both parts of the conference must register – and pay the fees associated with – the second portion using the standard SC web registration page.

Reimbursements will be processed within eight weeks after the conference, upon receipt of the SC Travel Expense Report, original receipts, and the SC Minority Outreach Program survey. Detailed travel expense guidelines will be available in mid-August.

Conference Registration Procedures

Once participants are selected to the SC06 Minority Outreach Program and they have confirmed their acceptance to the program, the Minority Outreach Program committee will provide further guidance on the SC registration procedures.

For additional information, please email: Valerie B. Thomas at vtthomas@hpcmo.hpc.mil



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Applications Closed as of
September 5, 2006

Acceptance Notification
October 1, 2006

[Questions](#)

Undergraduate and graduate student volunteers are needed to assist with the administration of the conference and will receive in exchange, free conference registration housing for out-of-town volunteers and most meals. Student volunteers have the opportunity to see and discuss the latest high-performance networking and computing technology and meet leading researchers from around the world while contributing to the success of this annual event.

Volunteers are expected to be available for a total of 4-5 hours of work per day during the week of the conference. No special skills or experience are necessary for most volunteer positions; however, some familiarity with computing platforms, audio/visual equipment, or office equipment can be helpful.

FREQUENTLY ASKED QUESTIONS:

[What is the SC06 conference?](#)

[Who is eligible to be a student volunteer?](#)

[When are student volunteers needed?](#)

[What do I get by being a student volunteer?](#)

[What don't I get as a student volunteer?](#)

[What kinds of work will I do as a student volunteer?](#)

[Why would I want to volunteer?](#)

[Do I have a vote in what work I do as a volunteer?](#)

[Do I have to be there for the whole conference to be a volunteer?](#)

[Where will I stay during the conference?](#)

[Are there students with special skills or other characteristics that you encourage to apply?](#)

[How do I apply?](#)

[When will I find out if you have selected me?](#)

[Other questions?](#)

Q. What is the SC06 conference?

A. SC06 is the current event of an annual conference series that focuses on the development and application of high-performance computing and communications technologies. This year's conference will be Sunday November 12th through Friday November 17th, 2006 in Tampa.

Q. Who is eligible to be a student volunteer?

A. Any full time college student may become a student volunteer at SC06. Both undergraduate and graduate students are welcome. You will need a recommendation from one of your professors. High school students are not encouraged to apply.

Q. When are student volunteers needed?

A. Official conference activities will start on Sunday November 12th and last through Friday at noon on November 17th. Student Volunteers are expected to arrive at the conference on Saturday afternoon November 11th for a Student Volunteer Orientation that evening.

Some volunteers are needed the week prior to the conference and a few days after for setup and/or teardown support on a few programs. Please indicate in your application if you are both interested and available before or after the official conference dates.

Q. What do I get by being a student volunteer?

A. The conference provides students with:

- Registration to the conference including technical sessions and keynote addresses
- Access to the exhibit floor
- Hotel accommodations at one of the conference hotels (out-of-town volunteers only)
- Conference proceedings on CD-ROM
- Admission to special events on Monday and Thursday evenings
- Meals during conference hours

Q. What don't I get as a student volunteer?

A. There are some important considerations for you to be aware of.

- Student volunteers are responsible for their travel expenses. In some cases, your school may be able to provide assistance.
- There are a few meals that are not provided by the conference committee. (Sunday, Tuesday and Wednesday dinner, for example).
- Extended-stay students may have additional meals not provided by the conference

Q. What kinds of work will I do as a volunteer?

A. There is a wide variety of volunteer tasks and we make our best effort to provide each student volunteer with a variety of duties. Many of the tasks are administrative but because they are often in support of sessions, volunteers have the opportunity to listen to some exciting presentations.

Students distribute and collect evaluation forms in each tutorial and technical session, assist speakers with handouts or A/V equipment and help with registration. Some positions require extended hours and days.

Q. Why would I want to volunteer?

A. Most volunteers are expected to work approximately 4-5 hours per day during the conference week. The rest of the time is available to attend technical sessions or visit vendor and research exhibits and network with thousands of people in the high-performance computing and communications community.

Q. Do I have a say in what work I do as a volunteer?

A. Not much, but we'll do what we can. There are often fewer volunteers than tasks. Unanticipated tasks can pop up anytime so we ask that volunteers be flexible and willing to help as needed. If you have special skills, we will try to use them.

Q. Do I have to be there for the whole conference to be a volunteer?

A. No. We realize that other commitments (like school) exist. We hope that students local to the Tampa area will be able to be flexible. You will need to be able to devote enough time to work 4-5 hours per day during the conference.

Q. Where will I stay during the conference?

A. Rooms will be available for out-of-town student volunteers at no cost. Room assignments are made as we get closer to the conference. The rooms are double occupancy. Roommate requests (roommates of the same gender) will be honored if possible.

Q. Are there students with special skills or other characteristics that you encourage to apply?

A. Some of our programs require special skills and extended volunteer time. Students with an interest in networking who can help the week before the conference are encouraged to apply. We also need students who can speak Japanese to assist at registration. This year (like last year) the conference is focusing on diversifying the student volunteer population. So, students from under-represented groups are especially encouraged to apply. International students are also encouraged to apply.

Q. How do I apply?

A. [Apply Here!](#)

You need to provide basic information about yourself and why you want to attend SC06 as a student volunteer. You also need to provide the name and e-address of a professor who will recommend you.

Q. When will I be notified regarding my application?

A. Applications will be accepted through Tuesday September 5th. We hope to have decisions made and volunteers notified by October 1st.

Q. Other questions?

If you have any additional questions, please email us at students@sc06.supercomputing.org



- History
- SC06 Committees
- Technical Program Committees
- Steering Committee
- Advisory Committee
- Minority Outreach
- Student Volunteers
- [Sponsoring Societies](#)
- Contact Information

Sponsoring Societies



IEEE COMPUTER SOCIETY

With nearly 100,000 members, the IEEE Computer Society is the world's leading organization of computer professionals. Founded in 1946, the Computer Society is the largest of the 37 societies of the Institute of Electrical and Electronics Engineers (IEEE).

The Computer Society's vision is to be the leading provider of technical information and services to the world's computing professionals. The Society is dedicated to advancing the theory, practice and application of computer and information processing technology.



ACM

Founded in 1947, ACM is a major force in advancing the skills of information technology professionals and students worldwide. Today, our 78,000 members and the public turn to ACM for the industry's leading Portal to Computing Literature, authoritative publications and pioneering conferences, providing leadership for the 21st century.

PROFESSIONAL SOCIETY REPRESENTATION

Ann Marie Kelly, IEEE Computer Society
Donna Baglio, ACM



History

SC06 Committees

Technical Program Committees

Steering Committee

Advisory Committee

Minority Outreach

Student Volunteers

Sponsoring Societies

Contact Information

Contact Info

SC06 conference committee email addresses are arranged alphabetically. Please send correspondence to the appropriate contact for more information on SC programs and initiatives:

ACM Student Research Competition

src@sc06.supercomputing.org

Awards

awards@sc06.supercomputing.org

Birds-of-a-Feather (BOF)

birds-of-a-feather@sc06.supercomputing.org

Education

edu@sc06.supercomputing.org

Exhibitor Forum

exhibitor-forum@sc06.supercomputing.org

Exotic Technology Initiative

exotic-technologies@sc06.supercomputing.org

HPC Analytics

analytics@sc06.supercomputing.org

HPC Analytics Challenge

analytics@sc06.supercomputing.org

HPC Bandwidth Challenge

bwc@sc06.supercomputing.org

Industry Exhibits

industry-exhibits@sc06.supercomputing.org

Invited Speakers

invited-speakers@sc06.supercomputing.org

Learning & Physical Challenges Education

lpce@sc06.supercomputing.org

Masterworks

masterworks@sc06.supercomputing.org

Media

media@sc06.supercomputing.org

MSI Outreach

msi@sc06.supercomputing.org

Panels

panels@sc06.supercomputing.org

Posters

posters@sc06.supercomputing.org

Research Exhibits

research-exhibits@sc06.supercomputing.org

SCGlobal and SCDesktop

scglobal@sc06.supercomputing.org

SCinet

scinet@sc06.supercomputing.org

Student Volunteers

students@sc06.supercomputing.org

Technical Papers

papers@sc06.supercomputing.org

Technical Program

program@sc06.supercomputing.org

Tutorials

tutorials@sc06.supercomputing.org

Workshops

workshops@sc06.supercomputing.org

Website Content

communications@sc06.supercomputing.org

Website Technical Issues / Broken Links

sc06@ultra16.com

- [Attendee Registration](#)
- [Exhibitor Registration](#)
- [Media Registration](#)
- [SC Desktop Registration](#)



REGISTRATION

The registration desk and conference store are located in the Level 2 lobby outside the Exhibits Hall.

Registration Desk Hours

- Saturday, Nov. 11 1:00p – 6:00p
- Sunday, Nov. 12 7:30a – 6:00p
- Monday, Nov. 13 7:30a – 8:30p
- Tuesday, Nov. 14 7:30a – 5:00p
- Wednesday, Nov. 15 7:30a – 5:00p
- Thursday, Nov. 16 7:30a – 5:00p
- Friday, Nov. 17 8:00a – 11:00a

Registration Levels

Attendees may register for the Technical Program, Tutorials, or Exhibits-only. Badge replacement (for any class of registration) will cost \$40.

Prices for Retirees is the same as that for Students.

	Before October 16, 2006	Starting October 16, 2006	On Site
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TECHNICAL PROGRAM

Registration, Member	\$390	\$560	\$560
Registration, Non-Member	\$495	\$700	\$700
Registration, Student	\$100	\$150	\$150

TUTORIALS, ONE DAY PASSPORT

Registration, Member	\$375	\$525	\$525
Registration, Non-Member	\$485	\$660	\$660
Registration, Student	\$100	\$150	\$150

TUTORIALS, TWO DAY PASSPORT

Registration, Member	\$595	\$825	\$825
Registration, Non-Member	\$755	\$1,035	\$1,035
Registration, Student	\$160	\$240	\$240

EXHIBITS

Registration, All	\$100	\$100	\$100
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By October
31st, 2006

SC DESKTOP (Remote Attendance)

Registration, Node	\$795		
Registration, Non-Member	\$70		
Registration, Member	\$60		
Registration, Student	\$15		

Each registration category provides access to a different set of conference activities, as summarized below.

	Tutorials (on day(s) of passport)	Technical Program	Exhibitor	Exhibits Tuesday- Thursday	Education Program
SCinet access (Sun-Thurs)	Yes	Yes	Yes	Yes	Yes
Keynote (Tuesday)		Yes	Yes	Yes	Yes
Exhibit Floor (Tues- Thurs)		Yes	Yes	Yes	
Exhibitor Forum (Tues-Thurs)		Yes	Yes	Yes	Yes
Posters (Tues-Thurs)		Yes	Yes	Yes	Yes
Poster Reception (Tues)		Yes	Yes	Yes	Yes
SC Global Showcase (Tues-Thurs)		Yes	Yes	Yes	Yes
Birds of a Feather (Tues-Thurs)		Yes	Yes	Yes	Yes
Challenge Presentations (Tues)		Yes	Yes		Yes
Panels (Friday)		Yes	Yes		Yes

Exhibits Opening Gala (Mon)		Yes	Yes		Yes
Scatter-Gather (Tues, Thurs)		Yes	Yes		
Tech Papers (Tues-Thurs)		Yes			
Masterworks (Tues-Thurs)		Yes			
Plenary Speakers (Wed, Thurs)		Yes			
Panels (Wed-Thurs)		Yes			
Workshops (Sun, Mon, Fri)		Yes			
Tutorial Sessions	Yes				
Tutorial Lunch	Yes				
Conference Party (Thurs)		Yes			
Exhibitors Party (Sun)			Yes		Yes
Education Program & Meals					Yes



- [Overview](#)
- [Schedule](#)
- [Keynote Speaker](#)
- [Awards & Prizes](#)
- [Gordon Bell Prizes](#)
- [HPC Competitions](#)
- [HPC Education](#)
- [SC Global / SC Desktop](#)
- [SCinet](#)
- [Exotic Technologies](#)



CONFERENCE

SC06, the premier international conference on high performance computing, networking and storage, will convene in November 2006 in Tampa, Florida. This year the conference will take its inspiration from Albert Einstein who said "Computers are incredibly fast, accurate and stupid; humans are incredibly slow, inaccurate and brilliant; together they are powerful beyond imagination."



[Overview](#)



[Schedule](#)



[Important Dates](#)



[Exotic Technologies](#)



[Keynote Speaker](#)



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Overview

SC06, the premier international conference on high performance computing, networking and storage, will convene in November 2006 in Tampa, Florida. This year the conference will take its inspiration from Albert Einstein who said "Computers are incredibly fast, accurate and stupid; humans are incredibly slow, inaccurate and brilliant; together they are powerful beyond imagination."

Following the traditions set with the first SC conference in 1988, exciting technical and educational programs, workshops, tutorials, exhibits, demonstrations and many other activities await attendees. SC06 is the one place where attendees can see tomorrow's technology being used to solve world-class challenge problems today.

With the conference growth over the past years, SC06 now has a total registered attendance in excess of 7,000. This attendance provides an excellent forum for researchers to explore ideas and build collaborations.

The following are some of the SC06 highlights:

SC06 provides a rigorous technical paper program with refereed papers on systems hardware and software, networking, storage, instruments, sensors, grids and web services along with novel applications of these technologies to problems of interest to science, engineering, business and society.

SC06 also provides an engaging 2-day tutorials program that welcomes attendees to explore the practical aspects of a full spectrum of high performance computing, networking, storage and analysis topics. Tutorial attendees have the opportunity to learn about new topics and investigate familiar topics in-depth with other experts.

Upgrades in systems, bandwidth and networking technologies over the last decade have resulted in dramatic increases in performance, scalability and overall computational power in high performance computing. More than ever before, organizations in commercial, government, university and research sectors are tasked with making sense of huge amounts of data.

HPC Analytics will again highlight rigorous and sophisticated methods of data analysis and visualization used in high performance computing by showcasing powerful analytics applications solving complex, real-world problems. SC06 will explore the ways in which high performance computing, networking, storage and analysis lead to advances in research, education and commerce. Innovative and diverse technologies are implemented within the HPC world every year. SC06 will introduce an initiative focusing on those emerging concepts and technologies that have the potential to reshape the HPC landscape.

The SC06 Education Program will continue the program begun in 2005 to bring K-16 teachers and faculty to the conference and provide them the tools and expertise to

incorporate modeling and simulation into their classrooms.

SC06 will be the foremost place to learn about the most important developments in High Performance Computing. On behalf of the organizing committee, we invite you to join us for a stimulating week in November 2006.

[Home](#) | [About](#) | [Contact Us](#) | [Registration](#) | [Sitemap](#)





POWERFUL BEYOND IMAGINATION

TAMPA CONVENTION CENTER, TAMPA BAY, FLORIDA
NOVEMBER 11-17, 2006

SC06 Schedule

Saturday, Nov 11

Time	Type	Session	Event	Chair/Speaker	Location
6:30AM - 8:30AM	Education Program	Registration	Registration		Salon I-III (Marriott)
7:00AM - 8:15AM	Education Program	Breakfast	Breakfast		Salon I-III (Marriott)
8:00AM - 8:30AM	Education Program	Welcome and Introductions	Welcome and Introductions		Salon I-III (Marriott)
8:30AM - 9:30AM	Education Program	Introduction to Cyberinfrastructure	Introduction to CyberInfrastructure		Salon I-III (Marriott)
9:30AM - 10:30AM	Education Program	Guest Speaker - Dale Jackson, EA Sports	Guest Speaker - Dale Jackson, EA Sports		Salon I-III (Marriott)
11:00AM - 12:00PM	Education Program	Introduction to 3DS Max - Part 1	Introduction to 3DS Max - part 1		Salon I-III (Marriott)
12:00PM - 1:30PM	Education Program	Saturday Lunch	Saturday Lunch		Salon IV (Marriott)
1:30PM - 3:00PM	Education Program	Introduction to 3DS Max - Part 2	Introduction to 3DS Max - Part 2		Salon I-III (Marriott)
3:30PM - 4:30PM	Education Program	Introduction to Education Booth - Demos	Introduction to Education Booth - Demos		Salon I-III (Marriott)
6:30PM - 8:30PM	Education Program	Education Program Reception - Hilton Swimming Pool	Education Program Reception - Hilton Swimming Pool		

Sunday, Nov 12

Time	Type	Session	Event	Chair/Speaker	Location
8:00AM - 3:00PM	Workshop	GCE06 (Day 1)	GCE06 - Grid Computing Environments 2006	Gregor von Laszewski	Salon G (Marriott)
8:00AM - 3:00PM	Workshop	Performance Analysis and Optimization	International Workshop on Performance Analysis and Optimization of High-End Computing Systems	Xian-He Sun	Salon J (Marriott)
8:00AM - 3:00PM	Workshop	Procurement	Best Practice in HPC Procurements	William T.C. Kramer	Salon I (Marriott)
8:00AM - 3:00PM	Workshop	TeraGrid Institute	TeraGrid Institute	Scott Lathrop	Salon H (Marriott)
8:30AM - 5:00PM	Tutorial	S01	Advanced MPI: I/O and One-Sided Communication	William Gropp, Ewing Lusk, Rajeev Thakur, Robert Ross	21
8:30AM - 5:00PM	Tutorial	S02	Parallel Computing 101	Quentin F. Stout, Christiane Jablonowski	23

8:30AM - 5:00PM	Tutorial	S03	Application Development Using Eclipse and the Parallel Tools Platform	Greg Watson, Craig Rasmussen, Beth Tibbitts	18
8:30AM - 5:00PM	Tutorial	S04	Introduction to Scientific Workflow Management and the Kepler System	Ilkay Altintas, Bertram Ludaescher, Scott Klasky, Mladen A. Vouk	19
8:30AM - 5:00PM	Tutorial	S05	A Practical Approach to Performance Analysis and Modeling of Large-Scale Systems	Darren J Kerbyson, Adolfo Hoisie	17
8:30AM - 5:00PM	Tutorial	S06	Computing Protection in Open HPC Environments	Stephen Q. Lau, Scott Campbell, William T. Kramer, Brian L. Tierney	24
8:30AM - 5:00PM	Tutorial	S07	GPGPU: General-Purpose Computation on Graphics Hardware	David Luebke, Mark Harris, Naga Govindaraju, Aaron Lefohn, Mike Houston, John Owens, Mark Segal, Matthew Papakipos, Ian Buck	25
8:30AM - 12:00PM	Tutorial	S08	Introduction to OpenMP	Tim Mattson	20
8:30AM - 12:00PM	Tutorial	S09	Eliminating Parallel Application Memory Bugs with TotalView	Chris Gottbrath	1-2
8:30AM - 12:00PM	Tutorial	S10	Open SpeedShop: Open Source Performance Analysis for Linux Clusters	Martin Schulz, Scott Cranford, Nathan DeBardeleben, James E. Galarowicz, Don Maghrak	22
8:30AM - 9:00AM	Education Program	Welcome and Logistics	Welcome and Logistics		Salon I-III (Marriott)
9:00AM - 10:00AM	Education Program	Plenary Session - Google	Plenary Session - Google		Salon I-III (Marriott)
10:30AM - 12:00PM	Education Program	Parallel Session - Sketchup	Parallel Session - Sketchup		Salon V (Marriott)
10:30AM - 12:00PM	Education Program	Parallel Session - Squeak	Parallel Session - Squeak		Salon IV (Marriott)
12:00PM - 1:30PM	Education Program	Sunday Lunch	Sunday Lunch		Salon I-III (Marriott)
1:30PM - 3:00PM	Education Program	nanoHUB - Online Simulation	nanoHUB - Online Simulation		Salon I-III (Marriott)
1:30PM - 5:00PM	Tutorial	S11	Principles and Practice of Experimental Performance Measurement and Analysis of Parallel Applications	Luiz DeRose, Bernd Mohr	1-2
1:30PM - 5:00PM	Tutorial	S12	The HPC Challenge (HPCC) Benchmark Suite	Piotr R Luszczek, David H Bailey, Jack J Dongarra, Jeremy Kepner, Robert F Lucas, Rolf Rabenseifner, Daisuke Takahashi	20
1:30PM - 5:00PM	Tutorial	S13	Cluster Storage and File System Technologies	Brent Welch, Marc Unangst	22
3:30PM - 4:30PM	Education Program	Zaida McCunney - MOPP	Zaida McCunney - MOPP		Salon I-III (Marriott)
6:00PM - 9:00PM	Social	Exhibitor Party	Exhibitor Party		

Monday, Nov 13

Time	Type	Session	Event	Chair/Speaker	Location
8:00AM - 5:00PM	Workshop	GCE06 (Day 2)	GCE06 - Grid Computing Environments 2006	Gregor von Laszewski	Salon G (Marriott)
8:00AM - 5:00PM	Workshop	GPU Computing	General-Purpose GPU Computing: Practice and Experience	Bartlett S. H. (Scott) Michel	Salon I (Marriott)
8:00AM - 5:00PM	Workshop	HPC for Nano-science and Technology	2nd IEEE/ACM International Workshop on High Performance Computing for Nano-science and Technology	Jun Ni	Salon J (Marriott)
8:00AM - 5:00PM	Workshop	Ultra-Scale Visualization	Workshop on Ultra-Scale Visualization	James Ahrens, Hank Childs, John Clyne, Wes Bethel, Jian Huang, Scott Klasky, Kwan-Liu Ma, Kenneth Moreland, Michael Papka, Valerio Pascucci, Han-Wei Shen, Debroah Silver	Salon H (Marriott)
8:30AM - 5:00PM	Tutorial	M01	Application Supercomputing and Multiscale Simulation Techniques	Alice E. Koniges, William Gropp, Ewing Lusk, David C. Eder	21
8:30AM - 5:00PM	Tutorial	M02	Parallel I/O in Practice	Robert Ross, Rajeev Thakur, William Loewe, Robert Latham	22
8:30AM - 5:00PM	Tutorial	M03	Reconfigurable Supercomputing	Tarek El-Ghazawi, Duncan Buell, Volodymyr Kindratenko, Kris Gaj	23
8:30AM - 5:00PM	Tutorial	M04	Introduction to Grid Computing: The First Steps	David Gehrig, Mike Freemon, Jaime Frey	19
8:30AM - 5:00PM	Tutorial	M05	Application Performance on the Blue Gene Architecture	Lorna Smith, Mark Bull, Alan Gray, Joachim Hein	18
8:30AM - 5:00PM	Tutorial	M06	Issues for the Future of Supercomputing: Impact of Moore's Law and Architecture on Application Performance	Erik P. DeBenedictis, David E. Keyes, Peter M. Kogge	24
8:30AM - 5:00PM	Tutorial	M07	High Performance Data Transfer	Phillip Dykstra	25
8:30AM - 12:00PM	Tutorial	M08	Programming Using RapidMind on the Cell BE	Michael D. McCool, Bruce D'Amora	20
8:30AM - 12:00PM	Tutorial	M09	Program Analysis Tools for Massively Parallel Applications: How to Achieve Highest Performance	Andreas Knuepfer, Dieter Kranzmueller, Bernd W. Mohr, Wolfgang E. Nagel	17
8:30AM - 12:00PM	Tutorial	M10	Realistic Visualization for Large-Scale Simulations	Voicu Popescu, Christoph Hoffmann	1-2
8:30AM - 9:30AM	Education Program	Plenary - TBD	Plenary - TBD		Salon I-III (Marriott)
9:30AM - 10:30AM	Education Program	Parallel - Barbara Bryan and Shodor - Part 1	Parallel - Barbara Bryan and Shodor - Part 1		Salon I-III (Marriott)
11:00AM - 12:00PM	Education Program	Parallel - Barbara Bryan and Shodor - Part 2	Parallel - Barbara Bryan and Shodor - Part 2		Salon I-III (Marriott)
12:00PM - 1:30PM	Education Program	Monday Lunch	Monday Lunch		Salon I-III (Marriott)
1:30PM - 5:00PM	Tutorial	M11	High-Performance Computing Methods for Computational Genomics	Srinivas Aluru, David Bader, Ananth Kalyanaraman	17
1:30PM - 5:00PM	Tutorial	M12	Overview of the Global Arrays Parallel Software Development Toolkit	Jarek Nieplocha, Bruce Palmer, Manojkumar Krishnan, P. Saddyappan	20

1:30PM - 5:00PM	Tutorial	M13	HPC meets IT	Sharan Kalwani	1-2
1:30PM - 2:30PM	Education Program	Teragrid - Part 1	Teragrid Part 1		Salon I-III (Marriott)
3:00PM - 4:30PM	Education Program	Teragrid - Part 2	Teragrid Part 2		Salon I-III (Marriott)
4:30PM - 5:30PM	Education Program	Individual Team Meetings	Individual Team Meetings		Salon I-III (Marriott)
7:00PM - 9:00PM	Social	Opening Gala	Opening Gala		TBD

Tuesday, Nov 14

Time	Type	Session	Event	Chair/Speaker	Location
8:30AM - 10:00AM	Invited Speaker	Keynote	The Coming Merger of Biological and Non Biological Intelligence	Ray Kurzweil	Ballroom A-D
10:30AM - 11:00AM	Paper	Architecture	A Performance Comparison through Benchmarking and Modeling of Three Leading Supercomputers: Blue Gene/L, Red Storm, and Purple	Adolfy Hoisie, Gregory Johnson, Darren Kerbyson, Michael Lang, Scott Pakin	20-21
10:30AM - 11:15AM	Masterwork	Astrophysics	The Cosmic Simulator	Michael L. Norman	Ballroom A
10:30AM - 11:00AM	Paper, Best Student Paper Finalist	Biology	PBPI: A High Performance Implementation of Bayesian Phylogenetic Inference	Xizhou Feng, Kirk W. Cameron, Duncan A. Buell	22-23
10:30AM - 11:00AM	Exhibitor Forum	Grids and Network Applications	Addressing High Performance and Grid Challenges: Intel and CERN	Stephen Wheat, Bob Jones	1-2
10:30AM - 11:00AM	Paper	Imaging and Visual Analysis	Toward Real-Time, Image Guided Neurosurgery Using Distributed and Grid Computing	Nikos Chrisochoides, Andriy Fedorov, Andriy Kot, Neculai Archip, Peter Black, Olivier Clatz, Alexandra Golby, Ron Kikinis, Simon K. Warfield	18-19
10:30AM - 11:00AM	Exhibitor Forum	Innovative Technologies I	Unleash the Power of Stream Processors with a New Software Platform for Commodity Hardware	Matthew Papakipos	13
10:30AM - 12:00PM	Education Program	Little Fe - Education Booth	Little Fe - Education Booth		
10:30AM - 11:00AM	SC Global Showcase	SCGlobal - Parade of Nations	Opening Address	tbd tbd	14 - 16
10:30AM - 10:50AM	Storage Challenge Finalist	Storage Challenge	Trading Memory for Disk: Using Parallel Access to Fast InfiniBand Disk Arrays for Large Computational Chemistry Applications	Troy Benjegerdes, Brett Bode, Kyle Schochenmaier	24-25
10:50AM - 11:10AM	Storage Challenge Finalist	Storage Challenge	Scaling NFS through RDMA for Cluster Computing	Dov Cohen, Jeff Decker, Noah Fischer, Helen Y. Chen, Jackie H. Chen	24-25

11:00AM - 11:20AM	SC Global Showcase	Advanced Medical Collaborative Technologies	Laboratory for Collaborative Diagnostics: Malaria TV	Peter Pennefather, Ian Crandall, West Suhanic	14 - 16
11:00AM - 11:30AM	Paper	Architecture	The Potential Energy Efficiency of Vector Acceleration	Christophe Lemuet, Jack Sampson, Jean-Francois Collard, Norm Jouppi	20-21
11:00AM - 11:30AM	Paper	Biology	Locality and Parallelism Optimization for Dynamic Programming Algorithms in Bioinformatics	Guangming Tan, Ninghui Sun, Shengzhong Feng	22-23
11:00AM - 11:30AM	Exhibitor Forum	Grids and Network Applications	Grid for Business Information: Extracting Maximum Value from Information	Ian Baird	1-2
11:00AM - 11:30AM	Paper	Imaging and Visual Analysis	Large Image Correction and Warping in a Cluster Environment	Vijay S Kumar, Benjamin Rutt, Tahsin Kurc, Umit Catalyurek, Sunny Chow, Stephan Lamont, Maryann Martone, Joel Saltz	18-19
11:00AM - 11:30AM	Exhibitor Forum	Innovative Technologies I	Using FPGAs in Supercomputers: Breaking with Reconfigurable Computing	Stefan Mohl	13
11:10AM - 11:30AM	Storage Challenge Finalist	Storage Challenge	HUST: A Heterogeneous Unified Storage System for GIS Grid	Lingfang Zeng, Ke Zhou, Zhan Shi, Dan Feng, Fang Wang, Changsheng Xie, Zhitang Li, Zhanwu Yu, Jianya Gong, Qiang Cao, Zhongying Niu, Lingjun Qin, Qun Liu, Yao Li	24-25
11:15AM - 12:00PM	Masterwork	Astrophysics	Understanding Our Cosmic Origin through Petascale Computing	Anthony Mezzacappa	Ballroom A
11:20AM - 11:40AM	SC Global Showcase	Advanced Medical Collaborative Technologies	Patient Safety Training using advanced medical and network technology	Stephen Small	14 - 16
11:30AM - 12:00PM	Paper, Best Student Paper Finalist	Architecture	The Design Space of Data-Parallel Memory Systems	Jung Ho Ahn, Mattan Erez, William J. Dally	20-21
11:30AM - 12:00PM	Paper	Biology	Computing Large Sparse Multivariate Optimization Problems with an Application in Biophysics	Emre H Brookes, Rajendra V Boppana, Borries Demeler	22-23
11:30AM - 12:00PM	Exhibitor Forum	Grids and Network Applications	gridMathematica: Overview and New Developments	Dr. Roman E. Maeder	1-2
11:30AM - 12:00PM	Paper	Imaging and Visual Analysis	Detecting Distributed Scans Using High-Performance Query-Driven Visualization	Kurt Stockinger, E. Wes Bethel, Scott Campbell, Eli Dart, Kesheng Wu	18-19
11:30AM - 12:00PM	Exhibitor Forum	Innovative Technologies I	Applying Scalable Acalis Field Programmable Multi-Cores to HPC	Gail A Walters	13
11:30AM - 11:50AM	Storage Challenge Finalist	Storage Challenge	High Performance Data Analysis for Particle Physics using The Gfarm File System	Nobuhiko Katayama, Mitsuhsa Sato, Taisuke Boku, Akira Ukawa, Shohei Nishida, Ichiro Adachi, Osamu Tatebe	24-25
11:40AM - 12:00PM	SC Global Showcase	Advanced Medical Collaborative Technologies	Extending Interactivity in Grid Collaboration Tools for Long Distance Biomedical Training and Research	Kai Zhang, Wei-Li Liu	14 - 16

12:00PM - 1:30PM	Education Program	Tuesday Lunch	Tuesday Lunch		Salon I-III (Marriott)
12:15PM - 1:15PM	BOF	Compframe	Compframe: Development of Component Frameworks for High Performance Computing	Rob Armstrong	17
12:15PM - 1:15PM	BOF	Dynamic Data	Dynamic Data-driven Applications Systems	Frederica Darema, Mario Rotea	Ballroom A
12:15PM - 1:15PM	BOF	Heterogeneous Optical	GHPN/GLIF: Delivery of Network Services across Heterogeneous Optical Domains	Dimitra Simeonidou, Gigi Karmous-Edwards	18-19
12:15PM - 1:15PM	BOF	HPC Challenge	The 2006 HPC Challenge Awards	Jack Dongarra, Jeremy Kepner	Ballroom B-C
12:15PM - 1:15PM	BOF	Open MPI	Open MPI Community Meeting	Jeff Squyres, Brian Barrett	22-23
12:15PM - 1:15PM	BOF	OSCAR	OSCAR Community Meeting	Stephen Scott, Thomas Naughton, Geoffroy Vallee	13
12:15PM - 1:15PM	BOF	Performance Tools	Performance Tools for Large-Scale Clusters	Zarka Cvetanovic	1-2
12:15PM - 1:15PM	BOF	TORQUE	TORQUE Resource Manager	Garrick Staples	20-21
12:15PM - 1:15PM	BOF	TotalView	TotalView Tips and Tricks	Chris Gottbrath, Peter Thompson	24-25
1:30PM - 2:00PM	HPC Analytics Challenge Finalist	Analytics Challenge	Remote Runtime Steering of Integrated Terascale Simulation and Visualization	Tiankai Tu, Hongfeng Yu, Jacobo Bielak, Omar Ghattas, Julio C. Lopez, Kwan-Liu Ma, David R. O'Hallaron, Leonardo Ramirez-Guzman, Nathan Stone, Ricardo Taborda-Rios, John Urbanic	24-25
1:30PM - 2:15PM	Masterwork	Biology	The Blue Brain Project	Henry Markram	Ballroom A
1:30PM - 2:00PM	Exhibitor Forum	Ethernet Interconnects	Dynamic Ethernet Lightpaths: On-demand 10GbE and GbE Connections for Research Networks	Jeff Verrant	1-2
1:30PM - 2:00PM	Paper	Memory	Sequoia: Programming the Memory Hierarchy	Kayvon Fatahalian, Timothy J. Knight, Mike Houston, Mattan Erez, Daniel R. Horn, Larkhoon Leem, Ji Young Park, Manman Ren, Alex Aiken, William J. Dally, Pat Hanrahan	20-21
1:30PM - 2:00PM	Paper, Best Paper Finalist	Molecular Dynamics	Scalable Algorithms for Molecular Dynamics Simulations on Commodity Clusters	Kevin J. Bowers, Edmond Chow, Huafeng Xu, Ron O. Dror, Michael P. Eastwood, Brent A. Gregerson, John L. Klepeis, Istvan Kolossvary, Mark A. Moraes, Federico D. Sacerdoti, John K. Salmon, Yibing Shan, David E. Shaw	22-23
1:30PM - 2:00PM	Paper	Scalable Systems Software	A Software Based Approach for Providing Network Fault Tolerance in Clusters Using the uDAPL Interface: MPI Level Design and Performance Evaluation	Abhinav Vishnu, Prachi Gupta, Amith Mamidala, Dhableswar Panda	18-19
1:30PM - 2:00PM	Exhibitor Forum	Storage Solutions I	Advances in RAID and HPC Storage Reliability	Garth Gibson	13
1:30PM - 2:00PM	SC Global Showcase	Technological Frontiers in Global Collaboration	ARCTIS: Augmented Reality Collaborative Tangible Interactive Simulation	Uwe Woessner, N. N.	14 - 16

2:00PM - 2:30PM	HPC Analytics Challenge Finalist	Analytics Challenge	Computational Oral and Speech Science on E-science Infrastructures	Kazunori Nozaki, Masaaki Noro, Masashi Nakagawa, Susumu Date, Kenichi Baba, Steven Peltier, Toshihiro Kawaguchi, Toyokazu Akiyama, Hiroo Tamagawa, Yohsuke Tanaka, Toshihiro Kawaguchi, Shinji Shimojo	24-25
2:00PM - 2:30PM	Exhibitor Forum	Ethernet Interconnects	Low-Latency Ethernet: The Ubiquitous Datacenter Interconnect	Uri Cummings	1-2
2:00PM - 2:30PM	Paper	Memory	CellSs: A Programming Model for the Cell BE Architecture	Pieter Bellens, Josep M. Perez, Rosa M. Badia, Jesus Labarta	20-21
2:00PM - 2:30PM	Paper	Molecular Dynamics	Blue Matter: Approaching the Limits of Concurrency for Classical Molecular Dynamics	Blake G. Fitch, Aleksandr Rayshubskiy, Maria Eleftheriou, T.J. Christopher Ward, Mark E. Giampapa, Michael C. Pitman, Robert S. Germain	22-23
2:00PM - 2:30PM	Paper	Scalable Systems Software	Problem Diagnosis in Large-Scale Computing Environments	Alexander V. Mirgorodskiy, Naoya Maruyama, Barton P. Miller	18-19
2:00PM - 2:30PM	Exhibitor Forum	Storage Solutions I	Paradigm Shift in the Data Storage Industry	Sujal M Patel	13
2:00PM - 2:30PM	SC Global Showcase	Technological Frontiers in Global Collaboration	Semantically-Enhanced Collaborative Engineering and Design Services	Michael Murphy, Thomas Fischer	14 - 16
2:15PM - 3:00PM	Masterwork	Biology	Elucidating Laws of the Unruly Jungle with Computational Approaches to Complex Ecological Networks	Neo Martinez	Ballroom A
2:30PM - 3:00PM	HPC Analytics Challenge Finalist	Analytics Challenge	High-throughput Visual Analytics Biological Sciences: Turning Data into Knowledge	Christopher S Oehmen, Lee Ann McCue, Joshua N. Adkins, Katrina Waters, Tim Carlson, William R. Cannon, Bobbie-Jo Webb-Robertson, Douglas Baxter, Elena Peterson, Mudita Singhal, Anuj Shah, Kyle Klicker	24-25
2:30PM - 3:00PM	Exhibitor Forum	Ethernet Interconnects	iWARP Ethernet: Key to Driving Ethernet into High Performance Environments	Charles R (Rick) Maule	1-2
2:30PM - 3:00PM	Paper	Memory	A Memory Model for Scientific Algorithms on Graphics Processors	Naga Govindaraju, Scott Larsen, Jim Gray, Dinesh Manocha	20-21
2:30PM - 3:00PM	Paper	Molecular Dynamics	Preliminary Investigation of Advanced Electrostatics in Molecular Dynamics on Reconfigurable Computers	Ronald Scrofano, Viktor K. Prasanna	22-23
2:30PM - 3:00PM	Paper, Best Student Paper Finalist	Scalable Systems Software	From Mesh Generation to Scientific Visualization: An End-to-End Approach to Parallel Supercomputing	Tiankai Tu, Hongfeng Yu, Leonardo Ramirez-Guzman, Jacobo Bielak, Omar Ghattas, Kwan-Liu Ma, David R. O'Hallaron	18-19
2:30PM - 3:00PM	Exhibitor Forum	Storage Solutions I	Future of Storage and Commodity Clusters	Dave Fellingner	13
2:30PM - 3:00PM	SC Global Showcase	Technological Frontiers in Global Collaboration	Sharing Interactive High-Resolution Media for Advanced Collaboration	JongWon Kim	14 - 16
3:30PM - 3:40PM	Bandwidth Challenge Finalist	Bandwidth Challenge	Secure File Sharing	Naoyuki Fujita, Hirofumi Ohkawa	24-25
3:30PM - 3:50PM	SC Global Showcase	Building Communities on the Grid	AccessGrid in the Canadian HPC scene	Brian Corrie	14 - 16
3:30PM - 4:15PM	Masterwork	Combustion	Terascale Direct Numerical Simulations of Turbulent Combustion	Jacqueline Chen	Ballroom A
3:30PM - 4:00PM	Exhibitor Forum	High Performance Interconnects	High Performance Networks for the Future	Duncan Roweth, Moray McLaren	1-2

3:30PM - 4:00PM	Paper, Best Student Paper Finalist	Interconnect Routing and Scheduling	Adaptive Routing in High-Radix Clos Networks	John Kim, William Dally, Dennis Abts	20-21
3:30PM - 4:00PM	Paper	Particles and Contium	Nested OpenMP for Efficient Computation of 3D Critical Points in Multi-Block CFD Datasets	Andreas Gerndt, Samuel Sarholz, Marc Wolter, Dieter an Mey, Christian Bischof, Torsten Kuhlen	22-23
3:30PM - 5:00PM	Scatter/Gather	Scatter / Gather I	Scatter/Gather	TBD TBD	18-19
3:30PM - 4:00PM	Exhibitor Forum	Storage Solutions II	Global Data Sharing: Addressing the Challenge of Data Locality	Wayne Karpoff	13
3:40PM - 3:50PM	Bandwidth Challenge Finalist	Bandwidth Challenge	High Speed Data Gathering, Distribution and Analysis for Physics Discoveries at the Large Hadron Collider	Julian J Bunn, Harvey Newman, Shawn McKee, David G Foster, Richard Cavanaugh, Richard Hughes-Jones	24-25
3:50PM - 4:00PM	Bandwidth Challenge Finalist	Bandwidth Challenge	Transporting Sloan Digital Sky Survey Data using SECTOR	Robert Grossman, Yunhong Gu, Michal Sabala, Shirley Connelly, David Hanley, Joe Mambretti, Alex Szalay, Ani Thakar, Jan vandenBerg, Alainna Wonders	24-25
3:50PM - 4:30PM	SC Global Showcase	Building Communities on the Grid	Broadening Participation on the Grid	Rollin W.I. Guyden, Stephenie McLean, Graig A. Gilham, Garrett Love	14 - 16
4:00PM - 4:10PM	Bandwidth Challenge Finalist	Bandwidth Challenge	High Throughput Feature-matching Analysis of Biological Spectral Data	Chris Oehmen, Douglas Baxter, Ryan Mooney, Shaun O'Leary, Tim Carlson	24-25
4:00PM - 4:30PM	Exhibitor Forum	High Performance Interconnects	Network Topologies for High Performance Computing: Ethernet, InfiniBand and Storage	Nikhil Kelshikar	1-2
4:00PM - 4:30PM	Paper	Interconnect Routing and Scheduling	A Near-Optimal Real-time Hardware Scheduler for Large Cardinality Crossbar Switches	Raymond R. Hoare, Zhu Ding, Alex K. Jones	20-21
4:00PM - 4:30PM	Paper	Particles and Contium	Modeling Pulse Propagation and Scattering in a Dispersive Medium: Performance of MPI/OpenMP Hybrid Code	Robert O Rosenberg, Guy Norton, Jorge C Novarini, Wendell Anderson, Marco Lanzagorta	22-23
4:00PM - 4:30PM	Exhibitor Forum	Storage Solutions II	Accelerating Data for Compute Clusters and Grids	Benoit Marchand	13
4:10PM - 4:20PM	Bandwidth Challenge Finalist	Bandwidth Challenge	All in a Day's Work: Advancing Data-Intensive Research with the Data Capacitor	Stephen C Simms, Matt Davy, Bret Hammond, Matt Link, Craig Stewart, Randall Bramley, Beth Plale, Dennis Gannon, Mu-Hyun Baik, Scott Teige, John Huffman, Rick McMullen, Doug Balog, Greg Pike	24-25
4:15PM - 5:00PM	Masterwork	Combustion	High Performance Computing for Combustion Applications	Gabriel Staffelbach	Ballroom A
4:20PM - 4:30PM	Bandwidth Challenge Finalist	Bandwidth Challenge	Streaming Uncompressed 4K Scientific Media	Laura Arns, Ryan Pedela, Michael Shuey, Preston Smith, Jenett Tillotson	24-25
4:30PM - 4:40PM	Bandwidth Challenge Finalist	Bandwidth Challenge	VFER: High-performance Transport in User Space	Stanislav Shalunov, Ivan Beschastnikh	24-25
4:30PM - 5:00PM	SC Global Showcase	Building Communities on the Grid	New Voices and New Visions for Engaging Native American Students in Computer Science	Glenn Bresnahan, Arthur Maccabe, Maria Williams, Arlan Sando, Erik Brisson, Jennifer Teig von Hoffman	14 - 16
4:30PM - 5:00PM	Exhibitor Forum	High Performance Interconnects	Enabling Next Generation Supercomputing Clusters	Michael Vrazel	1-2
4:30PM - 5:00PM	Paper	Interconnect Routing and Scheduling	Level-Wise Scheduling Algorithm for Fat Tree Interconnection Networks	Zhu Ding, Raymond R. Hoare, Alex K. Jones, Rami Melhem	20-21

4:30PM - 5:00PM	Paper	Particles and Contium	Performance Modeling and Optimization of a High Energy Colliding Beam Simulation Code	Hongzhang Shan, Erich Strohmaier, Ji Qiang, David H. Bailey, Kathy Yelick	22-23
4:30PM - 5:00PM	Exhibitor Forum	Storage Solutions II	Analyzing All the Data All the Time	Bill Blake	13
4:40PM - 4:50PM	Bandwidth Challenge Finalist	Bandwidth Challenge	Phoebus	Guy Almes, Martin Swany, Aaron Brown	24-25
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	A Middleware Approach in Facilitating Web-Mobile-Desktop (WMD) Application Communication in Distributed Systems	Long Tang	Ballroom Corridor
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	HPCBugBase: An Experience Base for HPC Defects	Taiga Nakamura	Ballroom Corridor
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	Employing Peer-to-Peer Services for Robust Grid Computing	Jik-Soo Kim	Ballroom Corridor
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	Statistical Inference for Efficient Microarchitectural and Application Analysis	Benjamin C Lee	Ballroom Corridor
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	CCA-LISI: On Designing A Common Component Architecture Parallel Sparse Linear Solver Interface	Fang Liu	Ballroom Corridor
5:15PM - 7:15PM	ACM SRC Poster, Poster	ACM Student Research Competition Reception	Adaptive Coarsening: Simple, Effective Floating-Point Compression	Christopher R Schroeder	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Pairwise Alignments on the Cell Processor	Vipin Sachdeva, Mike Kistler, Evan Speight	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	IANUS: Scientific Computing on an FPGA-based Architecture	Filippo Mantovani	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	The Finite-Volume Dynamical Core on the Cubed-Sphere	William Putman	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Optimizing EUDOC for the IBM eServer Blue Gene Supercomputer	Yuan-Ping Pang, Brent Swartz, Brian Smith, Tim Mullins, Amanda Peters, Roy Musselman	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Network Performance Impact of a Lightweight Linux for Cray XT3 Compute Nodes	Trammell Hudson, Ron Brightwell	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Patterns in Parallel Programs: Toward High-level Understanding of Large-Scale Traces	Bernhard Aichinger, Martin Schulz, Dieter Kranzmueller, Thomas Köckerbauer, Bronis R. de Supinski	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Reconfigurable Accelerator for Quantum Monte Carlo Simulations in N-body Systems	Akila Gothandaraman, G. Lee Warren, Gregory D. Peterson, Robert J. Harrison	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Application Controlled Parallel Asynchronous IO	Shujia Zhou, Amidu Oloso, Megan Damon, Tom Clune	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Alef Parallel SAT Solver for HPC Hardware	James R Ezick, Samuel B Luckenbill, Donald Nguyen, Peter Szilagyi, John Starks, Richard A Lethin	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Bringing Instruments into the Grid	Francesco Lelli	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Performance Evaluation of GPUs Using the RapidMind Development Platform	Michael D. McCool, Kevin Wadleigh, Brent Henderson, Hsin-Ying Lin	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Semantics for Hybrid Networks Using the Network Description Language	Jeroen van der Ham, Paola Grosso, Freek Dijkstra, Cees TAM de Laat	Ballroom Corridor

5:15PM - 7:15PM	Poster	Poster Reception	Cosmological Simulations on Supercomputers	Filippo Gioachin, Celso L. Mendes, Laxmikant V. Kale, Thomas R. Quinn	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	The SAGA C++ Reference Implementation: A Milestone toward New High-Level Grid Applications	Hartmut Kaiser, Andre Merzky, Stephan Hirmer, Gabrielle Allen, Edward Seidel	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Designing a Collaborative Cyberinfrastructure for Event-driven Coastal Modeling	Philip Bogden, Gabrielle Allen, Gerry Creager, Sara Graves, Rick Luettich, Lavanya Ramakrishnan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Parallel Performance Wizard: A Performance Analysis Tool for Partitioned Global-Address-Space Programming Models	Adam Leko, Hung-Hsun Su, Dan Bonachea, Bryan Golden, Max Billingsley, Alan George	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Visualization of Storage Controller Performance Data	Amit P Sawant, Matti Vanninen	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	N-Body Simulation on GPUs	Erich Elsen, Mike Houston, V. Vishal, Eric Darve, Pat Hanrahan, Vijay Pande	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Portable Performance Optimizations based on a Performance History of the Fusion Microturbulence Code GYRO	Mark R Fahey	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Zero-Force MPI: Toward Tractable Toolkits for High Performance Computing	Magdalena Slawinska, Dawid Kurzyniec, Jaroslaw Slawinski, Vaidy Sunderam	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Charm++ Simplifies Coding for the Cell Processor	David M. Kunzman, Gengbin Zheng, Eric Bohm, James C. Phillips, Laxmikant V. Kale	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	A Meta-Provenance Service to Infer Context from Provenance Data of Distributed Entities	Nithya N Vijayakumar, Beth Plale	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Component Architectures for Quantum Chemistry: Forging New Capabilities and Insights	Joseph P Kenny, Curtis L Janssen, Ida M B Nielsen, Manojkumar Krishnan, Vidhya Gurumoorthi, Edward F Valeev, Theresa L Windus	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Energy/Performance Modeling for Collective Communication in 3-D Torus Cluster Networks	S. Conner, G. M. Link, S. Tobita, M. J. Irwin, P. Raghavan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Accelerating Web Protocols Using RDMA	Dennis Dalessandro, Pete Wyckoff	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Scalable Software Infrastructure Project	Akira Nishida, Hisashi Kotakemori, Tamito Kajiyama, Akira Nukada	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	ASTEX: A Hot Path Based Thread Extractor for Distributed Memory System on a Chip	Eric Petit, Francois Bodin, Guillaume Papaure, Florence Dru	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	A Study of Process Arrival Patterns for MPI Collective Operations	Ahmad Faraj, Pitch Patarasuk, Xin Yuan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Optimized Collectives for PGAS Languages with One-Sided Communication	Dan Bonachea, Paul Hargrove, Rajesh Nishtala, Michael Welcome, Katherine Yelick	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Scalable Compression and Replay of Communication Traces in Massively Parallel Environments	Michael Noeth, Jaydeep Marathe, Frank Mueller, Martin Schultz, Bronis de Supinski	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Collective Operations using Low Level Interfaces on BG/L	Aleksandr Rayshubskiy, Blake Fitch	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Toward a Power Efficient Computer Architecture for Barnes-Hut N-Body Simulations	Konrad Malkowski, Padma Raghavan, Mary Jane Irwin	Ballroom Corridor

5:15PM - 7:15PM	Poster	Poster Reception	Fast Binary Serialization for Grid Systems with XBS	Tharaka Devadithya, Kenneth Chiu	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Data-Driven Time Parallelization	Lei Ji, Yanan Yu, Namas Chandra, Hugh Nymeyer, Ashok Srinivasan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Improving the Performance of Parallel Backprojection on a Reconfigurable Supercomputer	Ben Cordes, Miriam Leeser, Eric Miller, Richard Linderman	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Harnessing Grid Resources to Enable the Dynamic Analysis of Large Astronomy Datasets	Ioan Raicu, Ian Foster, Alex Szalay	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Utilizing Grid Computing Technologies for Advanced Reservoir Studies	Zhou Lei, Gabrielle Allen, Dayong Huang, Hartmut Kaiser, Xin Li, Chris White	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Human Arterial Tree Simulation on TeraGrid	Leopold Grinberg, Suchuan Dong, James Noble, Alexander Yakhot, George Karniadakis, Nicholas Karonis	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Implementing Algorithms on FPGAs Using High-Level Languages and Low-Level Libraries	Robin J Bruce, Richard Chamberlain, Malachy Devlin, Stephen Marshall	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	The Computer Failure Data Repository (CFDR): Collecting, Sharing and Analyzing Failure Data	Bianca Schroeder, Garth Gibson	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Improving Fault Resilience of High Performance Applications	Yawei Li, Zhiling Lan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Digital Sherpa	Ronald C. Price, Victor E. Bazterra, Wayne Bradford, Julio C. Facelli	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	The Structural Simulation Toolkit: Exploring Novel Architectures	Arun F Rodrigues, Richard C Murphy, Peter Kogge, Keith D Underwood	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	DejaVu: Transparent User-Level Checkpointing, Migration and Recovery for Distributed Systems	Joseph F. Ruscio, Michael A. Heffner, Srinidhi Varadarajan	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Asynchronous Programming with Tarragon	Pietro Cicotti, Scott B. Baden	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Parallel Massive Scale-Free Graph Generators	Andy Yoo, Keith Henderson	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	NCSA Environmental Cyberinfrastructure Demonstration Project: Creating Cyberenvironments for Environmental Engineering and Hydrological Science Communities	Barbara Minsker, Jim Myers, Mark Marikos, Tim Wentling, Steve Downey, Yong Liu, Peter Bajcsy, Rob Kooper, Luigi Marini, Noshir Contractor, Harold D. Green, Joe Futrelle	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Targeting Multi-Core Architectures for Linear Algebra Applications	Alfredo Buttari, jakub Kurzak, Jack Dongarra	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Powerful New Research Computing System Available via the TeraGrid	D Scott McCaulay, Matt R Link, George W Turner, David Y Hancock, Maria Morris, Craig A Stewart	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Engineering the 100 Terabyte Turbulence Database (or How To Track Particles at Home)	Eric A Perlman, Randal Burns	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	High Resolution, High Throughput Protein Structure Prediction using IBM Blue Gene Supercomputers: Predicting CASP Targets in Record Time	Ross C Walker, Srivatsan Raman, David Baker	Ballroom Corridor

5:15PM - 7:15PM	Poster	Poster Reception	Optimized Large File Access in Storage Clusters using common TCP/IP-based File Transfer Protocols	Stijn Eeckhaut, Michiel Mertens, Stijn De Smet, Brecht Vermeulen, Luc Andries, Mira Peltomaki	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	To Bid or Not To Bid: A Hybrid Market-Based Resource Allocation Framework	Elizeu Santos-Neto, Kate Keahey	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	SimBA: A Discrete Event Simulator for Performance Prediction of Volunteer Computing Projects	David A. Flores, Trilce Estrada, Michela Taufer, Patricia J. Teller, Andre Kerstens	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	A Reconfigurable Supercomputing Library for Accelerated Parallel Lagged-Fibonacci Pseudorandom Number Generation	Yu Bi, Gregory D Peterson, G. Lee Warren, Robert J. Harrison	Ballroom Corridor
5:15PM - 7:15PM	Poster	Poster Reception	Parallel I/O Advancements in Air Quality Modeling Systems	Todd Kordenbrock, Ron Oldfield, Jeffrey Young	Ballroom Corridor
5:30PM - 7:00PM	BOF	Cell BE	Cell BE Software Programming and Toolkits	Michael P Perrone, Tanaz Sowadagar	Ballroom A
5:30PM - 7:00PM	BOF	Global Automotive	HPC's Role in Global Automotive Design	Christian Tanasescu, Sharan Kalwani	1-2
5:30PM - 7:00PM	BOF	InfiniBand Routing	InfiniBand Routing and Switching: Improving Fabric Scalability, Distance, and Fault Isolation	Shawn Hansen, Ted Wilcox, Dan Stanzione	13
5:30PM - 7:00PM	BOF	OpenMP	OpenMP	Sanjiv Shah, Mark Bull	18-19
5:30PM - 7:00PM	BOF	Open SpeedShop	Open SpeedShop: Open Source Performance Analysis for Linux Clusters	Martin Schulz, Jim Galarowicz, William Hachfeld	20-21
5:30PM - 7:00PM	BOF	Pathway to Petascale	The Pathway to Petascale Science	Thom Dunning, Francine Berman, John R. Boisseau	24-25
5:30PM - 7:00PM	BOF	Science Gateway	Science Gateway, Portal and Other Community Interfaces to High End Resources	Nancy R Wilkins-Diehr, Thomas Soddemann	22-23
5:30PM - 7:00PM	BOF	SPEC HPG	SPEC HPG Benchmarks	Kumaran Kalyanasundaram	17
5:30PM - 7:00PM	BOF	TOP500	TOP500 Supercomputer	Erich Strohmaier	Ballroom B-C

Wednesday, Nov 15

Time	Type	Session	Event	Chair/Speaker	Location
8:30AM - 9:15AM	Invited Speaker, Awards	Cray and Fernbach Awards Lectures	Seymour Cray Award Lecture	Tadashi Watanabe	Ballroom B-C
9:15AM - 10:00AM	Invited Speaker, Awards	Cray and Fernbach Awards Lectures	Sidney Fernbach Award Lecture: Solving Einstein's Equations through Computational Science	Ed Seidel	Ballroom B-C
10:30AM - 11:00AM	ACM SRC Poster, Poster	ACM Student Research Competition Finalists	Employing Peer-to-Peer Services for Robust Grid Computing	Jik-Soo Kim	24-25
10:30AM - 11:00AM	Paper	Data Management and Query	Hypergraph Partitioning for Automatic Memory Hierarchy Management	Sriram Krishnamoorthy, Umit Catalyurek, Jarek Nieplocha, Atanas Rountev, P Sadayappan	22-23

10:30AM - 11:15AM	Masterwork	Fusion	Kinetic Simulation of Fusion Plasmas	W.W. Lee	Ballroom A
10:30AM - 11:00AM	Gordon Bell Finalist	Gordon Bell Finalists I	Large-Scale Electronic Structure Calculations of High-Z Metals on the BlueGene/L Platform	Francois Gygi, Erik W. Draeger, Martin Schulz, Bronis R. De Supinski, John A. Gunnels, Vernon Austel, James C. Sexton, Franz Franchetti, Stefan Kral, Christoph Ueberhuber, Juergen Lorenz	18-19
10:30AM - 11:00AM	Paper	Grid Allocation And Reservation	Improving Grid Resource Allocation via Integrated Selection and Binding	Yang-Suk Kee, Ken Yocum, Andrew A. Chien, Henri Casanova	20-21
10:30AM - 11:00AM	Exhibitor Forum	InfiniBand Interconnects	The Road to PetaFLOP Clusters	Yaron Haviv	1-2
10:30AM - 11:00AM	Exhibitor Forum	Roadmaps and Visions I	Hitachi's Approach to High Performance Computing	Satomi Hasegawa	13
10:30AM - 11:15AM	SC Global Showcase	Training: Archive and Retrieval of Collaborative Productions	AGVCR - AccessGrid Video 'Cassette' Recorder	Derek Piper, Derek Piper	14 - 16
11:00AM - 11:30AM	ACM SRC Poster, Poster	ACM Student Research Competition Finalists	Statistical Inference for Efficient Microarchitectural and Application Analysis	Benjamin C Lee	24-25
11:00AM - 11:30AM	Paper	Data Management and Query	Multiple Range Query Optimization with Distributed Cache Indexing	Beomseok Nam, Henrique Andrade, Alan Sussman	22-23
11:00AM - 11:30AM	Gordon Bell Finalist	Gordon Bell Finalists I	Large Scale Drop Impact Analysis of Mobile Phone Using ADVC on Blue Gene/L	Hiroshi Akiba, Tomonobu Ohyama, Yoshinori Shibata, Kiyoshi Yuyama, Yoshikazu Katai, Ryuichi Takeuchi, Takeshi Hoshino, Shinobu Yoshimura, Hirohisa Noguchi, Manish Gupta, John Gunnels, Vernon Austel, Yogish Sabharwal, Rahul Garg, Shoji Kato, Takashi Kawakami, Satoru Todokoro, Junko Ikeda	18-19
11:00AM - 11:30AM	Paper	Grid Allocation And Reservation	Toward a Doctrine of Containment: Grid Hosting with Adaptive Resource Control	Lavanya Ramakrishnan, Laura Grit, Adriana Iamnitchi, David Irwin, Aydan Yumerefendi, Jeff Chase	20-21
11:00AM - 11:30AM	Exhibitor Forum	InfiniBand Interconnects	Application Acceleration through MPI Overlap	Michael Kagan	1-2
11:00AM - 11:30AM	Exhibitor Forum	Roadmaps and Visions I	Cray: Creating a Path to Adaptive Supercomputing	Steve Scott	13
11:15AM - 12:00PM	Masterwork	Fusion	High Performance Computing in Magnetic Fusion Energy Research	Donald B. Batchelor	Ballroom A
11:15AM - 12:00PM	SC Global Showcase	Training: Archive and Retrieval of Collaborative Productions	Memetic: An AG Integrated Meeting Recorder	Andrew Rowley	14 - 16
11:30AM - 12:00PM	ACM SRC Poster, Poster	ACM Student Research Competition Finalists	HPCBugBase: An Experience Base for HPC Defects	Taiga Nakamura	24-25

11:30AM - 12:00PM	Paper, Best Student Paper Finalist	Data Management and Query	Estimating Query Result Sizes for Proxy Caching in Scientific Database Federations	Tanu Malik, Randal Burns, Nitesh V Chawla, Alex Szalay	22-23
11:30AM - 12:00PM	Gordon Bell Finalist	Gordon Bell Finalists I	High-Performance Computing for Exact Numerical Approaches to Quantum Many-Body Problems on the Earth Simulator	Susumu Yamada, Toshiyuki Imamura, Takuma Kano, Masahiko Machida	18-19
11:30AM - 12:00PM	Paper	Grid Allocation And Reservation	Grid Capacity Planning with Negotiation-based Advance Reservation for Optimized QoS	Mumtaz Siddiqui, Alex Villazon, Thomas Fahringer	20-21
11:30AM - 12:00PM	Exhibitor Forum	InfiniBand Interconnects	Building Highly Scalable and Reliable InfiniBand Clusters	Lloyd Dickman	1-2
11:30AM - 12:00PM	Exhibitor Forum	Roadmaps and Visions I	NEC High Performance Computing Solutions	Joerg Stadler	13
12:15PM - 1:15PM	BOF	Approaching Petascale	Approaching Petascale Computing	Grant Miller	22-23
12:15PM - 1:15PM	BOF	CyberBridges	CyberBridges: A Model Collaboration Infrastructure for e-Science	Heidi Alvarez, Julio Ibarra	17
12:15PM - 1:15PM	BOF	Cyberinfrax & Education	Cyberinfrastructure and Education	John Connolly, Elaine Landwehr	1-2
12:15PM - 1:15PM	BOF	Extreme Applications	Extreme Application Scalability	Wilfried Oed	13
12:15PM - 1:15PM	BOF	Fabric-Agnostic RDMA	Fabric-Agnostic RDMA with OpenFabrics Enterprise Distribution: Promises, Challenges, and Future Direction	Shawn Hansen, Sujal Das	24-25
12:15PM - 1:15PM	BOF	Open Trace	The Open Trace Format (OTF) and Open Tracing for HPC	Allen D. Malony, Wolfgang E. Nagel	18-19
12:15PM - 1:15PM	BOF	Programming FPGAs	Programming FPGAs: Challenges and Successes	Mark I Parsons, Francis W Wray	Ballroom A
12:15PM - 1:15PM	BOF	Rocks Clusters	Rocks Clusters	Steve Jones, Greg Bruno, Tim McIntire	20-21
12:15PM - 1:15PM	BOF	UPC	UPC: Unified Parallel C	Tarek El-Ghazawi, Lauren Smith	Ballroom B-C
1:30PM - 2:30PM	SC Global Showcase	Collaborative Performing Arts	InterPlay: Dancing on the Banks of Packet Creek	Jimmy Miklavcic	14 - 16
1:30PM - 2:00PM	Gordon Bell Finalist	Gordon Bell Finalists II	\$158/GFLOP Astrophysical N-Body Simulation with a Reconfigurable Add-in Card and a Hierarchical Tree Algorithm	Atsushi Kawai, Toshiyuki Fukushige	18-19
1:30PM - 2:00PM	Paper, Best Paper Finalist	Grid Applications	Parallel Genomic Sequence-Searching on an Ad-Hoc Grid: Experiences, Lessons Learned, and Implications	Mark Gardner, Wu-chun Feng, Jeremy Archuleta, Heshan Lin, Xiaosong Ma	20-21
1:30PM - 2:15PM	Masterwork	High Energy Physics	Search for Higgs Boson Diphoton Decay with CMS at LHC	Harvey Newman	Ballroom A

1:30PM - 3:00PM	Panel	High Productivity	High Productivity Computing and Usable Petascale Systems	Jeremy Kepner, Bob Lucas, Mootaz Enozahy, Jim Mitchell, Steve Scott	24-25
1:30PM - 2:00PM	Paper	MPI and Communication	High-Performance and Scalable MPI over InfiniBand with Reduced Memory Usage: An In-Depth Performance Analysis	Sayantan Sur, Matthew J. Koop, Dhabaleswar K. Panda	22-23
1:30PM - 2:00PM	Exhibitor Forum	Roadmaps and Visions II	Innovation beyond Imagination: The Road to PetaFLOPS Computing	Anthony O Bepi	13
1:30PM - 2:00PM	Exhibitor Forum	Software Tools I	Fortran Tools	Walt Brainerd	1-2
2:00PM - 2:30PM	Gordon Bell Finalist	Gordon Bell Finalists II	A 55 TFLOPS Simulation of Amyloid-forming Peptides from Yeast Prion Sup35 with the Special-purpose Computer System MDGRAPE-3	Tetsu Narumi, Yousuke Ohno, Noriaki Okimoto, Takahiro Koishi, Atsushi Suenaga, Noriyuki Futatsugi, Ryoko Yanai, Ryutaro Himeno, Shigenori Fujikawa, Mitsuru Ikei, Makoto Tajji	18-19
2:00PM - 2:30PM	Paper	Grid Applications	Sustainable Adaptive Grid Supercomputing: Multiscale Simulation of Semiconductor Processing across the Pacific	Hiroshi Takemiya, Yoshio Tanaka, Satoshi Sekiguchi, Shuji Ogata, Rajiv K. Kalia, Aiichiro Nakano, Priya Vashishta	20-21
2:00PM - 2:30PM	Paper	MPI and Communication	Adaptive, Transparent Frequency, and Voltage Scaling of Communication Phases in MPI Programs	Min Yeol Lim, Vincent W. Freeh, David K. Lowenthal	22-23
2:00PM - 2:30PM	Exhibitor Forum	Roadmaps and Visions II	Fujitsu's Vision for High Performance Computing	Motoi Okuda	13
2:00PM - 2:30PM	Exhibitor Forum	Software Tools I	AMD versus Intel: The Compiler as Referee	Michael Wolfe	1-2
2:15PM - 3:00PM	Masterwork	High Energy Physics	25 Years of Accelerator Modeling	Robert D. Ryne	Ballroom A
2:30PM - 3:00PM	SC Global Showcase	Collaborative Performing Arts	Performance and Presentation Production Elements	Beth Miklavcic, Jimmy Miklavcic	14 - 16
2:30PM - 3:00PM	Gordon Bell Finalist	Gordon Bell Finalists II	The BlueGene/L Supercomputer and Quantum Chromodynamics	Pavlos M. Vranas, Gyan Bhanot, Matthias Blumrich, Dong Chen, Alan Gara, Philip Heidelberger, Valentina Salapura, James C. Sexton	18-19
2:30PM - 3:00PM	Paper	Grid Applications	High-Performance Dynamic Graphics Streaming for Scalable Adaptive Graphics Environment	Byungil Jeong, Luc Renambot, Ratko Jagodic, Rajvikram Singh, Julieta Aguilera, Andrew Johnson, Jason Leigh	20-21
2:30PM - 3:00PM	Paper, Best Paper Finalist	MPI and Communication	Software Routing and Aggregation of Messages to Optimize the Performance of the HPCC Randomaccess Benchmark	Rahul Garg, Yogish Sabharwal	22-23
2:30PM - 3:00PM	Exhibitor Forum	Roadmaps and Visions II	Getting Ahead, Staying Ahead: Modular Sun x64 Servers for HPC	Bjorn Andersson	13
2:30PM - 3:00PM	Exhibitor Forum	Software Tools I	Distributed IMSL with 3rd Party Solutions in C, Java and .NET	Edward Stewart	1-2
3:30PM - 4:00PM	Exhibitor Forum	Innovative Technologies II	So What's Innovative and Exotic About Star-P for MATLAB and Other Clients?	Alan Edelman	13
3:30PM - 4:15PM	Invited Speaker	Invited Speakers I	Navy and Marine Corps High Performance Computing	Delores Etter	Ballroom B-C
3:30PM - 4:00PM	Exhibitor Forum	Software Tools II	Running a Top-500 Benchmark on A Windows Compute Cluster Server Cluster	Frank Chism, Jeremy Enos	1-2
4:00PM - 4:30PM	Exhibitor Forum	Innovative Technologies II	Acceleration Technologies: Understanding the Differences and Assessing What's Right for You	John L. Gustafson	13

4:00PM - 4:30PM	Exhibitor Forum	Software Tools II	Novel Techniques for Debugging and Optimizing Parallel Applications	Michael Rudgyard	1-2
4:15PM - 5:00PM	Invited Speaker	Invited Speakers I	Open Source Software: A Powerful Model for Inspiring Imagination	Matthew J. Szulik	Ballroom B-C
4:30PM - 5:00PM	Exhibitor Forum	Innovative Technologies II	Multi-Paradigm Computing	Josh Harr	13
4:30PM - 5:00PM	Exhibitor Forum	Software Tools II	Debugging Code Written for Multi-Core Chip Architectures	Chris Gottbrath	1-2
5:30PM - 7:00PM	BOF	Altair's PBS	Altair's PBS Professional Update	Michael Humphrey	18-19
5:30PM - 7:00PM	BOF	Best Practices	Best Practices in Cluster Management	Rick Friedman	24-25
5:30PM - 7:00PM	BOF	Cray XT3 Users	Cray XT3 Users	Neil Pundit, Rolf Riesen	Ballroom A
5:30PM - 7:00PM	BOF	Evaluating Petascale	Evaluating Petascale Infrastructure Systems: Benchmarks, Models, and Applications.	Robert J Fowler, Allan Snaveley, Daniel A Reed	17
5:30PM - 7:00PM	BOF	Monitoring Trix	Monitoring Trix	Christopher D Maestas	1-2
5:30PM - 7:00PM	BOF	Multi-core Usage	Multi-core Clusters Usage Model	Gilad Shainer	22-23
5:30PM - 7:00PM	BOF	PVFS	PVFS: A Parallel File System	Robert Ross, Robert Latham	20-21
5:30PM - 7:00PM	BOF	SGI Altix	User Experiences with the SGI Altix	Dr. Horst-D. Steinhoefer, Gary Jensen	Ballroom B-C
5:30PM - 7:00PM	BOF	Visualization	Visualization Using Linux Clusters	Glenn Lupton	13

Thursday, Nov 16

Time	Type	Session	Event	Chair/Speaker	Location
8:30AM - 9:15AM	Invited Speaker	Invited Speakers II	Real-time Supercomputing and Technology for Games and Entertainment	Hans Peter Hofstee	Ballroom B-C
9:15AM - 10:00AM	Invited Speaker	Invited Speakers II	Chip Innovations and Computer Revolution	Tsugio Makimoto	Ballroom B-C
10:30AM - 11:00AM	Exhibitor Forum	Advanced Networks	WiFiB: New Spectrum Links for Wireless Gigabit Transmission	Jonathan Wells	13
10:30AM - 11:00AM	Paper	Grid Networks and Portals	Revisiting Web Server Workload Invariants in the Context of Scientific Web Sites	Anne M Faber, Minaxi Gupta, Camilo H Viecco	20-21
10:30AM - 12:00PM	Panel	High Performance NFS	High Performance NFS: Facts and Fictions	Garth Gibson, Garth Gibson, Steve Kleiman, Spencer Shepler, Harriet Covertson, Peter Honeyman, David Black, Roger Haskin, Rob Kelley, Michael Callahan, Sujal Patel, Shmuel Shottan	24-25
10:30AM - 11:00AM	Exhibitor Forum	Innovative Technologies III	Advanced Memory Devices To Enhance Cluster Performance	Mike Jones	1-2

10:30AM - 11:15AM	Masterwork	Quantum Mechanics	Science at the Petascale - Tools in the Toolbox	Robert J. Harrison	Ballroom A
10:30AM - 12:00PM	Scatter/Gather	Scatter / Gather II	Scatter/Gather	TBD TBD	18-19
10:30AM - 11:00AM	Paper	Tools and Techniques for Performance	Architectures and APIs: Assessing Requirements for Delivering FPGA Performance to Applications	Keith Underwood, Scott Hemmert, Craig Ulmer	22-23
10:30AM - 11:15AM	SC Global Showcase	Training: Distributed Desktop Applications	TigerboardAG	Doc Lap Nguyen	14 - 16
11:00AM - 11:30AM	Exhibitor Forum	Advanced Networks	High Speed Firewalls: Securing the 10 Gigabit Ethernet WAN	Livio Riciulli	13
11:00AM - 11:30AM	Paper	Grid Networks and Portals	End-System Aware, Rate-Adaptive Protocol for Network Transport in LambdaGrid Environments	Pallab Datta, Wu-chun Feng, Sushant Sharma	20-21
11:00AM - 11:30AM	Exhibitor Forum	Innovative Technologies III	Liquid Cooling: A Next Generation Data Center Strategy	Herb Villa	1-2
11:00AM - 11:30AM	Paper	Tools and Techniques for Performance	Exploiting the Performance of 32-Bit Floating Point Arithmetic in Obtaining 64-Bit Accuracy	Julie Langou, Julien Langou, Piotr Luszczek, Jakub Kurzuk, Alfredo Buttari, Jack Dongarra	22-23
11:15AM - 12:00PM	Masterwork	Quantum Mechanics	Ab Initio Nuclear Structure Determination	David J. Dean	Ballroom A
11:15AM - 12:00PM	SC Global Showcase	Training: Distributed Desktop Applications	The Meeting List Tool - A Shared Application for sharing dynamic information in meetings.	Adam C Carter	14 - 16
11:30AM - 12:00PM	Exhibitor Forum	Advanced Networks	The Weakest Link: the Impact of Wide Area Networking on Networked Application Performance	George Salemie	13
11:30AM - 12:00PM	Paper	Grid Networks and Portals	Evaluating Grid Portal Security	David Del Vecchio, Victor Hazlewood, Marty Humphrey	20-21
11:30AM - 12:00PM	Exhibitor Forum	Innovative Technologies III	Topologies for Improved InfiniBand Latency	Stephen Fried	1-2
11:30AM - 12:00PM	Paper	Tools and Techniques for Performance	FFT Program Generation for Shared Memory: SMP and Multicore	Franz Franchetti, Yevgen Voronenko, Markus Pueschel	22-23
12:15PM - 1:15PM	BOF	99% Utilization	Is 99% Utilization of a Supercomputer a Good Thing?	Allan Snaveley, Jeremy Kepner	18-19
12:15PM - 1:15PM	BOF	Beyond MPI	Beyond MPI: Community Experience With Emerging Parallel Languages	Ronald W Green	20-21
12:15PM - 1:15PM	BOF	FAST-OS	FAST-OS: Forum to Address Scalable Technology for Runtime and Operating	Arthur Maccabe	13

Systems

12:15PM - 1:15PM	BOF	High Availability MPIs	Exploring the Importance of High Availability MPIs	Hakon Bugge	Ballroom A
12:15PM - 1:15PM	BOF	InfiniBand & OpenFabrics	InfiniBand and OpenFabrics at SC06	Troy Benjegerdes	22-23
12:15PM - 1:15PM	BOF	Internships & Mentoring	Internships and Mentoring in High Performance Computing Environments	Laura F McGinnis	17
12:15PM - 1:15PM	BOF	PAPI Users Group	PAPI Users Group	Philip J. Mucci, Shirley V. Moore	1-2
12:15PM - 1:15PM	BOF	TeraGrid Outreach	TeraGrid Outreach and Campus Partnerships	Scott Lathrop, Gary Bertoline	24-25
1:30PM - 2:15PM	Awards	Awards & Video	Awards Session	Dan Reed & Bill Gropp, Allan Sussman, Jeff Evans, Paul Fussell, Debbie Montano, Raymond L. Paden	24-25
1:30PM - 2:00PM	Paper	Blue Gene System Software	Topology Mapping for Blue Gene/L Supercomputer	Hao Yu, I-Hsin Chung, Jose Moreira	22-23
1:30PM - 3:00PM	Exotic Technologies	Exotic Technologies I	HPC Computational Systems of 2020	Erik DeBenedict, Fernand (Doc) Bedard, Thomas Sterling	18-19
1:30PM - 2:00PM	SC Global Showcase	Future Prototypes in Collaboration	Remote Interface Control within an Access Grid environment	John W. Langkals	14 - 16
1:30PM - 2:00PM	Paper	Grid Scheduling and Protocols	Supporting Dynamic Migration in Tightly Coupled Grid Applications	Liang Chen, Qian Zhu, Gagan Agrawal	20-21
1:30PM - 2:15PM	Masterwork	Materials and Nano-Science	Toward Material-Specific Simulations of High Temperature Superconductivity	Thomas C. Schulthess	Ballroom A
1:30PM - 2:00PM	Exhibitor Forum	Other Networks	Seamless Live Migration of Virtual Machines over the MAN/WAN	Franco Travostino	1-2
2:00PM - 2:30PM	Paper	Blue Gene System Software	Designing a Highly-Scalable Operating System: The Blue Gene/L Story	Jose Moreira, Michael Brutman, Jose Castanos, Tom Gooding, Todd Inglett, Derek Lieber, Pat McCarthy, Mike Mundy, Jeff Parker, Brian Wallenfelt, Mark Giampapa, Thomas Engelsiepen, Roger Haskin	22-23
2:00PM - 2:30PM	SC Global Showcase	Future Prototypes in Collaboration	The Canadian Design Research Network's Prototype Design Grid	John Danahy, West Suhanic	14 - 16
2:00PM - 2:30PM	Paper	Grid Scheduling and Protocols	Evaluation of a Workflow Scheduler Using Integrated Performance Modeling and Batch Queue Wait Time Prediction	Daniel Nurmi, Anirban Mandal, John Brevik, Chuck Koelbel, Rich Wolski, Ken Kennedy	20-21
2:00PM - 2:30PM	Exhibitor Forum	Other Networks	The Unified Wire Adapter	Wael Nouredidine Nouredidine	1-2
2:15PM - 3:00PM	Awards	Awards & Video	SC06 Video: Powerful Beyond Imagination	Wilfred Pinfold	24-25
2:15PM - 3:00PM	Masterwork	Materials and Nano-Science	Atomic Scale Design of Nanostructures	Jerry Bernholc	Ballroom A
2:30PM - 3:00PM	Paper	Blue Gene System Software	Design and Implementation of a One-Sided Communication Interface for the IBM eServer Blue Gene Supercomputer	Michael Blocksome, Charles Archer, Todd Inglett, Pat McCarthy, Mike Mundy, Joe Ratterman, Albert Sidelnik, Brian Smith, Gheorghe Almasi, Jose Castanos, Derek Lieber, Jose Moreira, Sriram Krishnamoorthy, Vinod Tipparaju, Jarek Nieplocha	22-23

2:30PM - 3:00PM	SC Global Showcase	Future Prototypes in Collaboration	Evolving Stories Project: Beautiful Instants	Lila Pine	14 - 16
2:30PM - 3:00PM	Paper	Grid Scheduling and Protocols	Benchmarking XML Processors for Applications in Grid Web Services	Michael Head, Madhusudhan Govindaraju, Robert Engelen, Wei Zhang	20-21
3:00PM - 3:15PM	SC Global Showcase	SCGlobal Closing Remarks	Closing Comments	Ron Rankine	14 - 16
3:30PM - 4:00PM	Exhibitor Forum	Clusters And Blades	The Tera-10 System: Implementing the Number 1 Supercomputer in Europe	Jean-Louis Lahaie	13
3:30PM - 4:15PM	Masterwork	Computer Science - Architecture	Re-Inventing the x86 Architecture: Quad-Core and Beyond	Richard Oehler	Ballroom A
3:30PM - 5:00PM	Panel	Data Intensive Computing	Data Intensive Computing	Leslie S Perkins, Phil Andrews, Dhabaleswar Panda, Dave Morton, Ron Bonica, Nick Werstiuk, Randy Kreiser	24-25
3:30PM - 5:00PM	Exotic Technologies	Exotic Technologies II	HPC Storage Systems of 2020	Garth Gibson, Mark H. Kryder, Richard F. Freitas	18-19
3:30PM - 4:00PM	Paper	Grid Resource Management	CRUSH: Controlled, Scalable, Decentralized Placement of Replicated Data	Sage A Weil, Scott A Brandt, Ethan L Miller, Carlos Maltzahn	20-21
3:30PM - 4:00PM	Paper	MPI Tools and Performance Studies	MPI Performance Analysis Tools on Blue Gene/L	I-Hsin Chung, Robert E. Walkup, Hui-Fang Wen, Hao Yu	22-23
4:00PM - 4:30PM	Exhibitor Forum	Clusters And Blades	Blades: Innovations and Viability for HPC	Steve Langdon	13
4:00PM - 4:30PM	Paper	Grid Resource Management	CycleMeter: Detecting Fraudulent Peers in Internet Cycle Sharing	Zheng Zhang, Y. Charlie Hu, Samuel P. Midkiff	20-21
4:00PM - 4:30PM	Paper	MPI Tools and Performance Studies	Quantifying the Potential Benefit of Overlapping Communication and Computation in Large-Scale Scientific Applications	Jose Carlos Sancho Pitarch, Kevin J. Barker, Darren J. Kerbyson, Kei Davis	22-23
4:15PM - 5:00PM	Masterwork	Computer Science - Architecture	Beyond the Beyond and the Extremes of Computing	Thomas Sterling	Ballroom A
4:30PM - 5:00PM	Exhibitor Forum	Clusters And Blades	Introducing LiquidIQ: A Next Generation System for High Performance Computing	Mike Kemp	13
4:30PM - 5:00PM	Paper	Grid Resource Management	Designing a Runtime System for Volunteer Computing	David P. Anderson, Carl Christensen, Bruce Allen	20-21
4:30PM - 5:00PM	Paper	MPI Tools and Performance Studies	Blocking vs. Non-Blocking Coordinated Checkpointing for Large-Scale Fault Tolerant MPI	Camille Coti, Thomas Herault, Pierre Lemarinier, Laurence Pilard, Ala Rezmerita, Eric Rodriguez, Franck Cappello	22-23
6:30PM - 9:30PM	Social	Conference Reception	Conference Reception		

Friday, Nov 17

Time	Type	Session	Event	Chair/Speaker	Location
8:00AM - 5:00PM	Workshop	Petascale Data Storage	Petascale Data Storage	Garth Gibson	1-2
8:00AM - 5:00PM	Workshop	Virtualization Technologies	1st IEEE/ACM International Workshop on Virtualization Technologies in Distributed Computing	Katarzyna Keahey	17
8:30AM - 10:00AM	Panel	Grid Standards	What's Inside the Grid? A Discussion of Standards and the Future of Computing	Gary Tyreman, Mark Linesch, Stephen Wheat, Andre Hill	24-25

8:30AM - 10:00AM	Panel	Reconfigurable Supercomputing	Is High-Performance, Reconfigurable Computing the Next Supercomputing Paradigm?	Tarek El-Ghazawi, Dave Bennett, Dan Poznanovic, Allan Cattle, Keith Underwood, Rob Pennington, Duncan Buell, Alan George, Volodymyr Kindratenko	22-23
10:30AM - 12:00PM	Panel	Long Term Storage	100 Years of Digital Data	Francine Berman, Robert Chadduck, William Lefurgy, Dan Atkins, Tony Hey	24-25
10:30AM - 12:00PM	Panel	Multi-Core Issues	Multi-Core for HPC: Breakthrough or Breakdown?	Thomas Sterling, Peter Kogge, William J Dally, Steve Scott, William Gropp, David Keyes, Pete Beckman	22-23

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Keynote Speaker

Ray Kurzweil, described as “the restless genius” by the Wall Street Journal, and “the ultimate thinking machine” by Forbes, will be the keynote speaker at SC06.

Kurzweil’s keynote address will open the SC06 Technical Program on Tuesday, November 14, in the Tampa Convention Center. In it he will explain how the paradigm shift rate is doubling every decade, so the twenty-first century will see 20,000 years of progress at today’s rate. Computation, communication, biological technologies (for example, DNA sequencing), brain scanning, knowledge of the human brain, and human knowledge in general are all accelerating at an even faster pace, generally doubling price-performance, capacity, and bandwidth every year.

Kurzweil was the principal developer of the first CCD flat-bed scanner, the first omni-font optical character recognition, the first print-to-speech reading machine for the blind, the first text-to-speech synthesizer, the first music synthesizer capable of recreating the grand piano and other orchestral instruments, and the first commercially marketed large-vocabulary speech recognition.

Among Kurzweil’s many honors, he is the recipient of the MIT- Lemelson Prize. In 1999, he received the National Medal of Technology, the nation’s highest honor in technology, from President Clinton in a White House ceremony. In 2002, he was inducted into the National Inventor’s Hall of Fame, established by the U.S. Patent Office. More information about his accomplishments can be found on his [website](#).

Kurzweil has written five books, four of which have been national best sellers. “The Age of Spiritual Machines” has been translated into nine languages and was the #1 best selling book on Amazon.com in science. His latest book, “The Singularity is Near,” which went into its fourth printing after two months, was the fourth best-selling science book of 2005 according to Amazon.com.

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Awards & Prizes

The SC conference continues to serve as the venue for announcing several distinguished professional awards, recognizing key contributions to high performance computing, networking and storage.

The **Seymour Cray Computer Science and Engineering Award** recognizes innovative contributions to high performance computing systems that best exemplify the creative spirit of Seymour Cray. The award will be presented in a plenary session on Wednesday at 8:30am.

The **Sidney Fernbach Memorial Award** honors innovative uses of high performance computing in problem solving. The award will be presented in a plenary session on Wednesday at 8:30am.

The **Gordon Bell Prizes** recognize groundbreaking achievements for performance and scalability in several categories on genuine and specific scientific applications. In recent years, awards have been granted in four categories (not all are awarded every year):

- Peak performance based on sustained floating point operations per second
- Price per performance ratio measured in sustained flop/s per dollar of acquisition cost
- Special accomplishment for innovation in scalable implementation
- Scalability achieved through language constructs

Six finalists have been identified, from which one or more Gordon Bell Prizes will be awarded at SC06:

- An electronic structure calculation from a group at Lawrence Livermore National Laboratory headed by Francois Gygi has attained over 200 Tflop/s on the full BlueGene/L system over a mix of FFTs, linear algebra, and first-principles potential calculations for high-Z metals, with attention to logical-to-physical mappings.
- A lattice quantum chromodynamics simulation by a group at IBM headed by Pavlos Vranas has attained 12 Tflop/s on 32K BG/L cores, and studied QCD as an HPC benchmark that exposes memory and network latencies.
- The structural dynamics of drop impact on a cellphone using an unprecedentedly detailed finite element analysis for such a system is the subject of a study on 4K nodes of BG/L by a group led by Hiroshi Akiba of Allied Engineering.
- The Earth Simulator is the platform of choice for a group headed by Masahiko Machida of the Japan Atomic Energy Agency, which has attained 18.7 Tflop/s on a Hubbard model to study superfluidity.
- MD-GRAPe was employed in a molecular dynamics simulation of the formulation of

amyloids in yeast prions, attaining 55 Tflop/s, in a collaboration led by Makoto Taij of RIKEN.

- Atsushi Kawai of the Saitama Institute of Technology led a team that built an FPGA-based system to perform astrophysical N-body simulations using a hierarchical tree algorithm, at a cost of approximately 16 cents per delivered Mflop/s, about two-third of the cost of the most recent price-performance winner.

This year the Gordon Bell Prize finalists will be presented in a separate track in the technical program.

The **Best Paper** and **Best Student Paper Awards** recognize the best of many outstanding papers in a highly competitive Technical Program. The honors will be presented in a special session Thursday at 1:30pm.

[SC06 Video: Powerful Beyond Imagination](#): An astonishing new generation of powerful supercomputers is opening windows to discovery that were previously unimaginable. From physics to engineering to medicine; from the subatomic to the cosmic, these new tools are pushing back age-old barriers to understanding and are radically changing the field of scientific exploration. Are we on the brink of a new Golden Age of Science?

[Questions](#)



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Gordon Bell Prizes

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HPC Competitions

Challenges provide a way to showcase HPC resources at SC06 in a friendly competition with other participants. Building on prior successes, SC06 will feature the following challenges:

- [Analytics Challenge](#)
- [Bandwidth Challenge](#)
- [Storage Challenge](#)
- [ACM Student Research Competition](#)

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- Learning & Physical Challenges Education

SC Global / SC Desktop

SCinet

Exotic Technologies

HPC Education Program

[Submissions Now Open](#)

March 27, 2006

Applications Notification

July 25, 2006

Applications Close

June 30, 2006

The Education Program theme this year is "Impacting the classroom curricula: Bridging Discovery and Learning." The program builds and expands on the new pedagogical model for High Performance Computing where focus for participants is to empower faculty, students and K-12 educators to apply computational science across a variety of content areas. These areas include nanotechnology, life sciences, earth and atmospheric sciences, computer science, mathematics, and aerospace engineering and aeronautics.

Faculty, undergraduate students, and K-12 instructors participating in the SC06 program will benefit in a number of ways:

- All participants will be exposed to tutorials that focus on how high performance computing can be applied in the classroom
- Participants on the learning teams will gain experiential knowledge based on the proposed on-site projects that will demonstrate how educators can leverage, and use, the Grid in their classrooms
- Educators and students will receive additional benefits from these proposed activities such as greater inclusion in the full SC conference and more exposure to leading vendors from industry

Participants will be selected from different geographic regions for participation in an onsite project during the SC06 conference. They will work with scientists on project simulation employing recently gathered data. Each participant needs to file an individual application. Even if you are considering participating as a team — each team member, needs to file a separate application that will be reviewed. Scientists and educators will share information on applying high performance computing tools and resources across the curriculum and design ways in which to integrate modeling and visualization techniques into classroom instruction.

Learning & Physical Challenges Education Program

A new initiative of SC06 is the [Learning & Physical Challenges Education Program](#) (LPCE). This program is to empower grades 7 - 16 faculty/educators, special education professionals, and students to apply computational science across a variety of content areas in classrooms. The selected institutions will be announced at the SC06 Conference in Tampa, Florida.

The institutions selected to participate will receive travel reimbursement to the SC06 Conference in Tampa. We will provide free SC Desktop which allows attendees to remotely

attend Technical program talks. In addition, the institutions will receive two seminar days of presentations by high performance computing experts at their institutions in 2007. To be considered, please fill out the application on the Learning & Physical Challenges Education (LPCE) submission form.

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Deadline **October 31, 2006** for **Satellite Site Registration** Open: [Click Here](#)

SC Global will play a major part in SC06 by linking geographically diverse communities from around the world and allowing them to showcase the latest in high-end collaborative technologies. These technologies will vary in type from simple video conferencing and multipoint information dissemination to highly sophisticated arts productions. A wide and diverse group of people from business and educational researchers to corporate executive are touched by these technologies enabling those with scarce resources, specialized expertise or equipment and education resources to collaborate in a timely and cost effective manner.

As in past years, SC Global will be open to all conference attendees. To view the SC Global Schedule, [click here](#) and filter by *SC Global*.

As in past years, SCGlobal will be open to all conference attendees.

SCDesktop Brings SC'06 to You

Deadline **October 31, 2006** for **SC Desktop Registration** Open: [Click Here](#)

From it's successful debut last year, SCDesktop returns to bring you to SC'06 remotely as a "virtual attendee". As a Virtual Attendee you will have access to:

- Keynote
- Plenary Sessions
- Masterworks Sessions
- Exhibitor Forums
- Poster Sessions
- SC Global Sessions

Virtual Attendees will access the above sessions via collaborative technologies that provide two-way audio and video connections to the conference. As part of your registration you, as an attendee will receive a limited-term license for the collaboration software. Testing and training will be provided so that attendees can be confident of successful participation.

Time Delayed Broadcast: An added feature of SCDesktop this year is the introduction of Time Delayed Broadcasting. All programs that are offered to our virtual attendees will be re-broadcast twelve (12) hours later. This time delay will allow our European and Asian audience to enjoy the programs at a better time locally.

Don't know which you should sign up for?

Participation by remote attendees can be done in one of two ways, via SC Global Satellite sites or SC Desktop. See the chart below. Pricing for SC Desktop can be found on the

registration page: [click here](#).

SC Global

- FREE via SC Global Satellites
- SC Global Sessions

SC Desktop

- Registration Fee
- Keynote
- Plenary Sessions
- Masterworks Sessions
- Exhibitor Forums
- Poster Sessions
- SC Global Sessions

Questions: scglobal@sc06.supercomputing.org

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Exotic Technologies

SCinet

Connection Request System Opens
August 31, 2006

Late Request Penalty Begins
October 1, 2006

Connection Request System Closes
October 27, 2006

[Questions](#)

SCinet is the most advanced technology network built on site to enable world-class demonstrations and to support the annual SC conference. Designed and built entirely by volunteers from universities, government and industry, SCinet combines leading-edge hardware and high-speed wide-area communication links to provide conference exhibitors and attendees with world-class connectivity to national and international networks. SCinet features a high-performance production-quality network with direct wide area connectivity to many national and worldwide networks through peering relationships with principle networks, an Open InfiniBand (OpenIB) Network, and an extremely high performance experimental network, Xnet. In addition, SCinet will provide the foundation for conference programs — including SC Global, the HPC Bandwidth Challenge and the HPC Analytics Challenge.

Volunteers from educational institutions, high-performance computing centers, network equipment vendors, US National Laboratories, research institutions, research networks and telecommunication carriers work together to design and deliver the SCinet networks. Industry vendors and carriers donate much of the equipment and services needed to build the LAN and WAN infrastructure. Planning begins more than a year in advance of each SC conference and culminates with a high-intensity installation just seven days before the conference begins.

Online registration for SCinet network connections opens July 31, 2006. Your booth Point of Contact (POC) will receive a username and password along with instructions needed to make your network connection request. Please contact your booth POC to obtain this information. Connection requests made on or after October 1st, 2006 will be subject to a late fee.

Exhibitors please note: It is important when constructing your booth that you do not place heavy booth material on the fiber near the edge of your booth. To avoid damage to the network fiber taped to the exhibit hall floor, point-loads must not be positioned within 18 inches inside the booth boundary along all aisle ways. Use the links below to visit the SCinet web pages.

- [High Performance Bandwidth Challenge](#)
- [SCinet Connection Request](#)
- [SCinet Network Security Policy](#)

- [SCinet Service Level Policy](#)
- [SCinet Wireless Service Policy](#)
- [SCinet Xnet](#)

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Exotic Technology Initiative

New for 2006, the Exotic Technologies Initiative is a search for innovative technologies with the potential to make a major impact on high performance computing over the next 15 years. Technologies such as field programmable gate arrays, multi-core chips, holographic storage and novel cooling techniques may offer near term benefits while quantum computing, chip level optical interconnect and fundamental material breakthroughs offer potential paradigm changing benefits over the long term.

Each year, we discuss what will be the best system at our next SC meeting, but SC06 will be different. Instead of looking one, two or three years ahead, the SC06 Exotic Technologies Initiative will create a forum for dialogue about what will be the hottest systems at SC2020.

There will be two Exotic Technologies Panel sessions. In the first, experts in advanced system technologies will predict the design of the best HPC architectures in 2020. They will defend why they think the technology they select will be the winning technology 15 years from now. The second panel will be storage experts who will predict the best storage architectures in 2020. The panels will pick one set of technology — not a list of possibilities — to define the system. They will define the performance and aspects of the technologies and explain why their system is the most likely to succeed.

How do attendees participate? Besides questions and comments at the sessions, attendees will vote for the proposed systems of 2020 they think are most likely to succeed. The presentations, votes and attendee comments will all be sealed in a time capsule that will be opened in 2020, which will be used in 2020 to compare the predications to reality. The time capsule will also include an appropriate prize for the presenter who made the best prediction.

Exotic technologies will also have an exhibit to showcase technology being developed today that could be in the systems of 2015 to 2020. Technology developers will exhibit candidate technology for the future systems during exhibit hours.

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TECHNICAL PROGRAM

SC06 provides a rigorous technical paper program with refereed papers on systems hardware and software, networking, storage, instruments, sensors, grids and web service along with novel applications of these technologies to problems of interest to science, engineering, business and society.



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EXHIBITS

At SC06, industry and research exhibits from the world's leading companies and organizations are showcased in a dynamic, interactive environment. High performance computing, networking, storage, data management, scientific visualization and collaborative technology are featured.

A limited number of opportunities remain for Industry and Research Exhibitors seeking space at SC06. Potential Exhibitors should contact SC06 and Hall-Erickson, Inc at 630-434-7779 for more information on exhibiting.

Questions



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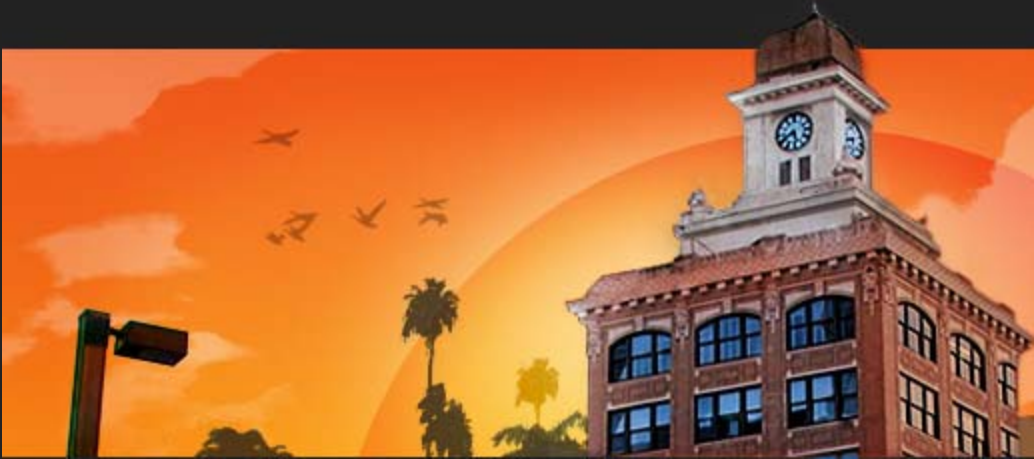


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NEWS & PRESS

Welcome to the press room for SC06, the premier international conference on high performance computing, networking, storage and analysis.



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TRAVEL

SC06, the premier international conference on high performance computing, networking, storage and analysis, will convene in November 2006 in Tampa. Tampa Bay is a vibrant waterfront area on Florida's beautiful West Coast and offers a unique blend of urban excitement set in a natural surrounding.



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