Organization

Local Organizing Committee

Professor Anter El-Azab, Conference Chair School of Computational Science, Mechanical Engineering Department and Materials Science Program Florida State University Tallahassee, Florida USA

Professor Max Gunzburger, Conference Co-Chair Director, School of Computational Science and Department of Mathematics Florida State University Tallahassee, Florida USA

Professor Simon Phillpot, Conference Secretary Department of Materials Science and Engineering University of Florida Gainesville, Florida USA

Deadlines

Deadline for Submission of Abstracts

Notification of Abstract Acceptance	April 2008
Request of Formal Acceptance Letters (International Speakers)	April 2008
Posting Guidelines for Proceedings Papers	April 2008
Proceedings Papers Submission Window	June-July 2008
Hotel Reservations Window	July-August 2008

March 2008

Contact

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http://www.mmm2008.org

Location

The conference will be held in Tallahassee, Florida, USA.

MMM 2008 is hosted by Florida State University and the university's School of Computational Science. It will be held at the Tallahassee-Leon County Civic Center at the east side of campus. Tallahassee is located in Florida's panhandle and is the capital city of the state. It offers fine dining, museums, galleries, monuments, and historic sites as well as numerous outdoor activities. It is also within a short drive of some of the best beaches in the country.



Florida State University is a national graduate university offering leading undergraduate, graduate, and professional programs, many of which rank among America's top 25 public universities.





Tackling Materials Complexities via Computational Science





FLORIDA STATE UNIVERSITY
SCHOOL OF COMPUTATIONAL SCIENCE

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Symposia

Mathematical issues in multiscale materials modeling Weinan E, Princeton University, USA

Max Gunzburger, Florida State University, USA Richard B Lehoucq, Sandia National Laboratories, USA Mitchell Luskin, University of Minnesota, USA Statistical methods for material deformation and failure M.-Carmen Miguel, Universitat de Barcelona, Spain

Mikko J. Alava, Helsinki University of Technology, Finland Istvan Groma, Eotvos University Budapest, Hungary Stefano Zapperi, Università di Roma, Italy

Multiscale mechanics

Tom Arsenlis, Lawrence Livermore National Laboratory, USA Peter W. Chung, U.S. Army Research Laboratory, USA Marc G.D. Geers, Eindhoven University of Technology, The Netherlands

Yoji Shibutani, Osaka University, Osaka, Japan Multiscale modeling of microstructure evolution in materials

Dieter Wolf, Idaho National Laboratory, USA Jeff Simmons, Air Force Research Laboratory, USA Simon Phillpot, University of Florida, USA Anter El-Azab, Florida State University, USA Daniel Weygand, University of Karlsruhe (TH), Germany Computational materials design

Zi-Kui Liu, Pennsylvania State University, USA Hamid Garmestani, Georgia Institute of Technology, USA Moe Khaleel, Pacific Northwest National Laboratory, USA Mei Li, Ford Motor Company, USA

Multiscale modeling of radiation effects in materials Pascal Bellon, University of Illinois at Urbana-Champaign, USA

Fei Gao, Pacific Northwest National Laboratory, USA Syo Matsumura, Kyushu University, Japan Roger E. Stoller, Oak Ridge National Laboratory, USA Computational modeling of biological and soft condensed matter systems

Jeffery G. Saven, University of Pennsylvania, USA Wei Yang, Florida State University, USA T.P. Straatsma, Pacific Northwest National Laboratory, USA **Defects in materials--Honoring Professor Nasr Ghoniem on** the occasion of his 60th birthday

Ladislas Kubin, CNRS-ONERA, France Steve Zinkle, Oak Ridge National Laboratory Shahram Sharafat, University of California, Los Angeles Hanchen Huang, Rensselaer Polytechnic Institute Anter El-Azab, Florida State University Elasticity to atomistics: predictive modeling of defect behavior--Honoring Professor David J. Bacon on the occasion

of his retirement from the University of Liverpool Yury N. Osetskiy, Oak Ridge National Laboratory Ron O. Scattergood, North Carolina State University Anna M. Serra, Universitat Politecnica de Catalunya, Spain Roger E. Stoller, Oak Ridge National Laboratory

Multiscale Materials Modeling

The field of multiscale materials modeling aims to enhance predictive materials research by combining advanced materials theory with the principles of computational science. This field thus blends together theoretical chemistry, physics and mechanics of materials with mathematical modeling, computational mathematics and scientific computing algorithms. Multiscale modeling of materials is an evolution of the traditional materials modeling field, which is driven by highly improved theoretical formalisms of materials science problems; it also represents a revolution in this field because of the possibility of developing frameworks to tackle materials modeling problems at multiple time and length scales in unifying ways. Because it is a part of the wider field of materials science, multiscale materials research is intimately linked with experiments, and, together, these research methodologies will serve the dual role of enhancing our fundamental understanding of materials and enabling the design of new materials with improved performance.

Call for Papers

The conference solicits theoretical, computational, and experimental contributions addressing one or more of the multiscale materials modeling issues in the following topical areas:

- Mathematical basis for multiscale modeling of materials
- Statistical frameworks for multiscale materials modeling
- Mechanics of materials across time and length scales
- Multiscale modeling of microstructure evolution in materials
- Defects in materials
- Computational materials design based on multiscale and multi-level modeling principles
- Multiscale modeling of radiation effects in materials and materials response under extreme conditions
- Multiscale modeling of bio and soft matter systems

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