

PRELIMINARY AGENDA

Foundations '04: A Workshop for VV&A in the 21st Century

sponsored by
DoD, DOE, JHU/APL, LANL, NASA, ODU, USACM,
and a host of other national and international
organizations

13–15 October 2004
Arizona State University
Tempe, AZ

You are invited to participate in Foundations '04, a follow-on workshop to the highly successful Foundations '02 workshop held at the Applied Physics Laboratory of Johns Hopkins University on 22-24 October 2002. Foundation '02 proceedings are available from the Defense Modeling and Simulation Office (<https://www.dmsomil>) or Clemson University (<http://www.cs.clemson.edu/~found04>). Hardcopies of the proceedings are available from the Society for Computer Simulation in San Diego, CA (<http://www.scs.org>).

The Foundations '04 Workshop builds on Foundations '02 covering the entire spectrum of M&S communities: users, managers, developers, and researchers. Our guidelines are as follows:

- First, there are many VV&A practices that have not been universally adopted. In this case, Foundations '04 will continue to formulate and document best practices.
- Second, there are many issues for which basic research is needed. For example, there was some consensus at Foundations '02 that formal methods for VV&A should be developed and adaptive programming issues be explored. Foundations '04 will provide a forum for researchers to present the latest thinking on VV&A.

SITE AND ACCOMMODATIONS. Foundations '04 will be held at the **Memorial Union at Arizona State University (ASU)** in Tempe, Arizona. See <http://www.asu.edu/mu/>.

Accommodations are available at the **Twin Palms Hotel** (225 E. Apache Blvd, Tempe, AZ 85281, 480-967-9431) which is within walking distance of the Memorial Union. Special workshop rates of \$89/night plus tax are being offered – mention **Foundations '04** when making your reservations.

Please note that there will be a Presidential debate at ASU the week of Foundations '04, so make your travel arrangements early. The hotel reservation deadline is 12 September.

REGISTRATION. Registration information is available from SCS (<http://www.scs.org>). The early registration fee (before 12 September) is \$175. After 12 September, the fee is \$200.

ACTIVITIES INCLUDED. The registration fee includes coffee breaks and 2 lunches as well as a mixer at the end of the first day.

SAMPLE PAPERS. The following constitute just a sample of the papers being presented.

“The Good, the Bad, and the Ugly of Predictive Science”	Francis M. Hemez (Los Alamos National Laboratory) and Yakov Ben-Haim (Israel Institute of Technology)
“The Use of M&S VV&A as a Risk Mitigation Strategy in Defense Acquisition”	Michelle Kilikauskas, David Hall, Richard Maquire, Dirk Brade, and persons from BWB (Germany), FMV (Sweden), AMSAA/ATEC (US Army), Canadian Forces, Turkish Forces
“Quantitative measures in M&S VV&A”	Dirk Brade (Swedish Defense Research Agency)
“A Framework for Uncertainty Quantification Combining Detailed Computer Simulations and Experimental Data.”	Dave Higdon, Brian Williams, Michael McKay, and Lisa Moore (Los Alamos National Laboratory)
“Calibration Contra Validation: Characterizations and Consequences”	Timothy Toscano and Laura Swiler (Sandia National Laboratories)
“Qualitative and Quantitative Linkage from V&V and Uncertainty to QMU and QRC to Risk”	Roger W. Logan and Cynthia K. Nitta (Lawrence Livermore National Laboratory)
“Design of Computer Experiments in Sensitivity Analysis”	Max Morris (Iowa State University)
“ASME Performance Test Codes Committee, PTC 61 Verification and Validation in Computational Fluid Dynamics and Heat Transfer”	Hugh Coleman (University of Alabama)