



Technical Committee on Autonomous and Autonomic systems (TCAAS)

Technical Committee on Complexity in Computing (TCCX)

SMC-IT
2009

CALL FOR PAPERS

THIRD IEEE INTERNATIONAL CONFERENCE ON SPACE MISSION CHALLENGES FOR INFORMATION TECHNOLOGY

SMC-IT 2009

JULY 19 - 23, 2009

**Pasadena Convention Center
Pasadena, California**

The Third IEEE International Conference on Space Mission Challenges for Information Technology (SMC-IT) is the first forum to gather system designers, engineers, scientists, practitioners, and space explorers for the objective of advancing information technology for space missions. The forum will provide an excellent opportunity for fostering technical interchange on all hardware and software aspects of IT applications in space missions. The conference, held in the beautiful city of Pasadena, California, will focus on current IT practice and challenges as well as emerging information technologies with applicability for future space missions.



TOPICS OF INTEREST

- Reliable software and innovative fault tolerance approaches, including software-based methods
- Autonomy - rovers to operations
- Autonomy - system validation
- Automated planners and schedulers
- Human robotic interfaces
- Engineering design and modeling tools
- IT tools for risk management
- Innovative IT methods for rapid technology mission infusion
- Real-time information systems
- Embedded IT systems (for control or onboard processing)
- Machine vision and advanced image processing methods
- Real-time software and IT hardware in the loop
- Novel applications - spacecraft, ground systems, telecom
- IT for low cost operations
- OOD methods that enhances reuse
- Middleware services
- Knowledge capture, management, and ontologies
- On-board vehicle health diagnosis and repair
- Reducing software development costs and risk through CMMI
- Science and user software applications
- IT for the Interplanetary Network and next generation space-based networking
- New software architectures, languages, compilers, tools for space missions
- Spaceborne computing architectures
- Advanced high performance computing systems and applications
- Revolutionary new information technologies

CONFERENCE CHAIRS

Sven Grenander (+1 818 354-0156)
Larry Bergman (+1 818 393-5314)

EXHIBITS

For information on exhibiting at SMC-IT 2009 please send an email to exhibits@smc-it.org

TO JOIN the SMC-IT informational / mailing list, please send a blank email message to: generalinterest-join@smc-it.org

For inquiries on student / university participation send an email to: students@smc-it.org