



## Call for Papers

### Thermal & Fluids Analysis Workshop (TFAWS) 2016

NASA Ames Research Center  
Moffett Field, CA  
August 1-5, 2015



You are invited to submit paper abstracts for the Thermal & Fluids Analysis Workshop 2016. The workshop will include short courses of general interest in thermal and fluids, discussions on special topics, hands-on training sessions in thermal and fluid software packages, vendor demonstrations, and paper sessions on the topics covering **Active Thermal/Fluids**, **Passive Thermal**, **Aerothermal**, and **Interdisciplinary**. Other relevant topics, such as heat pipes and thermal testing, are also welcome. ITAR-restricted sessions may be offered on request.

#### Active Thermal/Fluids

- Fluids and CFD: analysis, design and test for space and aeronautics
- Active thermal systems and control: components, thermal systems, analysis and testing
- Life support: environmental control and life support systems
- Analytical model correlation to existing test or flight data
- Cryogenic Fluid Systems

#### Passive Thermal

- Passive thermal systems & control: design, analysis, build, and test for space and aeronautics
- Spacecraft thermal protection system, ablative systems, plume impingement, ascent/entry heating
- Radiative heat transfer, analytical and experimental approaches
- Studies related to MLI, coatings, thermophysical/optical properties, and surface finishes
- Ground test, manufacturing processes, and simulation
- Plume impingement effects on ground support elements
- Analytical model correlation to existing test or flight data

#### Aerothermal

- Aerothermodynamics: design, analysis, build, and test for space and aeronautics
- Aeroheating environments: ascent, on-orbit, re-entry
- Plume impingement, on-orbit contamination
- Free molecular heat transfer, analytical and experimental approaches
- Analytical model correlation to existing test or flight data

#### Interdisciplinary

- Multi-disciplinary problems: design, analysis, build, and test for space and aeronautics
- Integrated analysis: chemical reactions, electromagnetic interactions, micromechanics, structural motion
- Technology innovations, current and in-development
- Creating environments of inclusion to enable innovation
- Lessons learned
- Various fluid management and modeling techniques as applied to propulsion
- Vibration and acoustics in the launch environment
- Modeling or testing error approximation and verification/validation techniques

Abstracts should be submitted by **May 20, 2016** to **Monica Guzik** ([monica.c.guzik@nasa.gov](mailto:monica.c.guzik@nasa.gov)). Typically, 20 minutes will be allotted for each paper, with 10 additional minutes for questions. Instructions for electronic manuscript submission will accompany acceptance of abstract. It is the author's responsibility to ensure all content is not restricted by law, contract, or prohibited in any way from being published at this conference.

For more information, please visit our website at <https://tfaws.nasa.gov>.