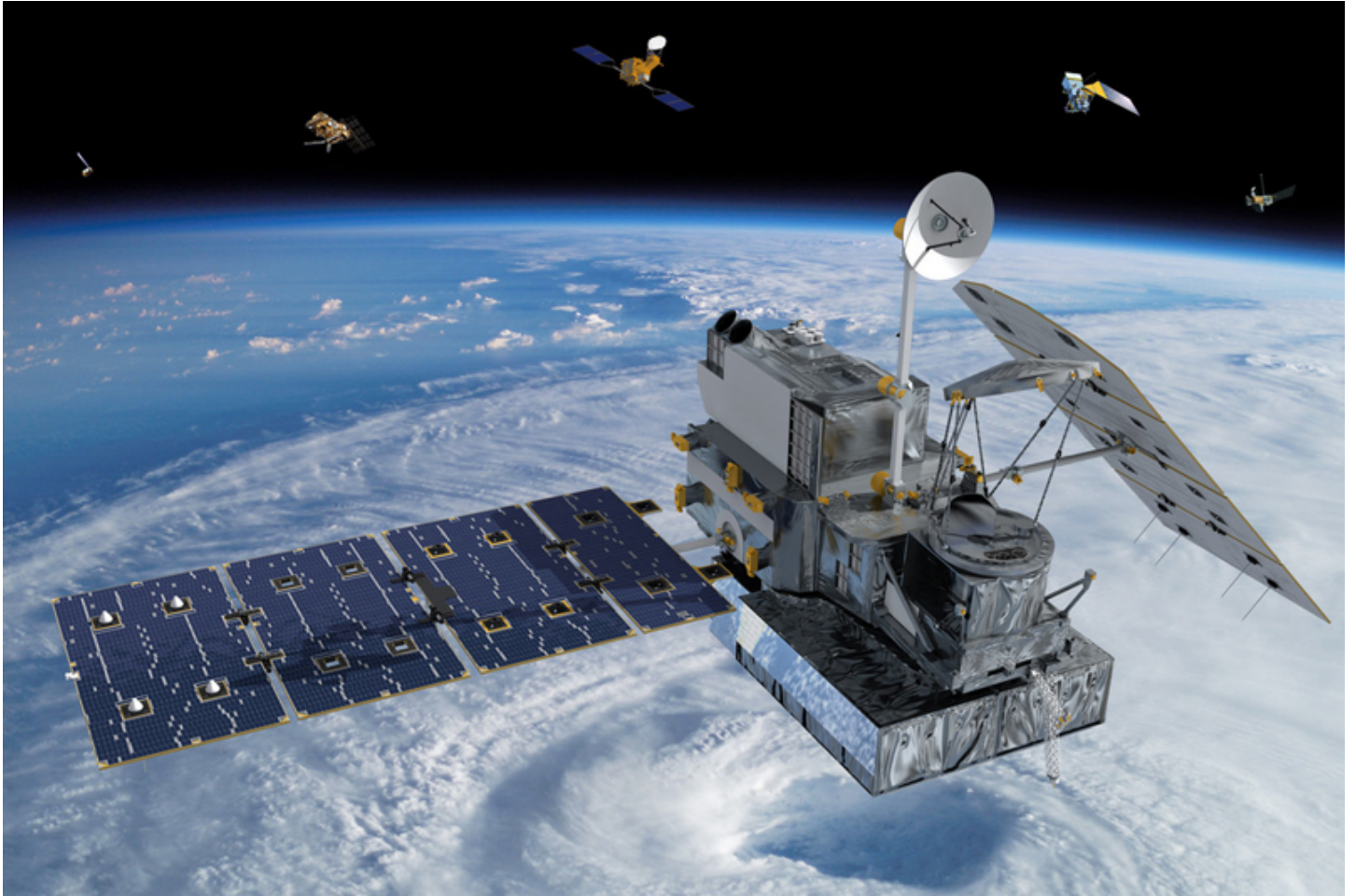


10th anniversary Workshop on Spacecraft Flight Software



The Johns Hopkins University Applied Physics Laboratory in conjunction with the NASA Jet Propulsion Laboratory, The Aerospace Corporation, and Southwest Research Institute, is hosting the 10th anniversary Workshop on Spacecraft Flight Software (FSW-2017) in Laurel, Maryland from December 4th to 8th 2017.

Location:

[Building 200 E-100 Auditorium](#)

11101 Johns Hopkins Road

Laurel, MD, USA 20723

Important Dates:

Flight Software Workshop: **December 4-8, 2017** [Registration Questions Request to add to Constant Contact](#)

Core Flight Software Community Day: **Monday, December 4th, 2017** [Questions](#)

First Call for Presentations: **Tuesday, June 6th, 2017**

Abstracts Submission Deadline: **Monday, August 28th, 2017**

Acceptance Notification: **Monday, October 2nd, 2017**

Presentations Deadline: **Monday, November 24th, 2017**

Presentations:

There is no fee for attending this workshop, the cost is free. **However, attendance will be limited to 120 attendees.** Presentations are not necessary to attend the workshop. Presentations are always video-taped and published on this website at a later date. **Therefore, presentations MUST NOT contain US Export Controlled information (aka ITAR), and notice of this must be indicated on all presentations. All primary authors of the selected presentations MUST submit required release forms which will be emailed later.**

Since this is the 10th anniversary of the Workshop, we are encouraging couple of presentations regarding progress and challenges in Spacecraft Flight Software over the last 10 years. Cyber security of space assets is becoming important. In view of that, we have added a SECRET level day at the end of the workshop week. We are also inviting **poster presentations** from students on topics below.

Workshop Background:

With the advent of faster processors and advanced hardware architectures, the modern spacecraft is highly reliant upon flight software for mission success. Software is integral to most of the spacecraft subsystems ranging from power to propulsion to instrument operations. Additionally, spacecraft developers are moving beyond providing only infrastructure to creating applications that can revolutionize how these vehicles are operated and how data is processed on-board.

This workshop provides an opportunity to present current flight architectures, novel approaches to mission solutions, and techniques for flight software development, integration, test and verification in an informal and open setting that facilitates communication across organizations and agencies. The following is a list of potential subject areas:

- * Flight software engineering and testing
- * Autonomy
- * Model based software development
- * Navigation, fault management, and command sequence control
- * Onboard communication
- * Space network protocols
- * Cubesat Flight Software
- * Cyber Security for Space
- * Onboard data processing
- * Instrument Flight Software
- * Software modeling, simulation, and testbeds
- * Spacecraft software architectures

- * Agile software development
- * Flight processors and operating systems
- * Planning, tasking, and execution
- * Commercial Spacecraft Software
- * Systems engineering
- * Software Verification, and Validation
- * Testing Technologies
- * Lessons learned

This is a PRESENTATION ONLY workshop. Please note, that due to the addition of SECRET day (on Friday of the workshop), abstract and presentation submissions have changed this year. Please carefully review submission procedures below.

NON-SECRET presentations MUST NOT contain US Export Controlled information (aka ITAR), and notice of this must be indicated on all presentations. All NON-SECRET abstracts and presentations must be ready for public release. Authors will receive the required release forms that they must review with the legal experts in their organization, sign, and upload prior to presentation deadline (i.e. Nov 27th 2017).

Information regarding SECRET level day attendance and presentation will be provided separately to presenters.

The Aerospace Corporation, NASA Jet Propulsion Laboratory, Southwest Research Institute, and The Johns Hopkins University Applied Physics Laboratory are the Founding Sponsors of the Flight Software Workshop. Additional sponsorship opportunities exist for 2017 workshop. Please email inquiries to the organizing committee at spacefsw@gmail.com.