



CALL FOR PAPERS The 2026 AIAA/AAS Space Flight Mechanics Meeting

Hyatt Regency Orlando, Orlando, Florida ABSTRACT DEADLINE: May 22, 2025

The 34th Space Flight Mechanics Meeting will be held January 12-16, 2026 at the Hyatt Regency Orlando in Orlando, Florida in conjunction with the 2026 AIAA SciTech Forum. The meeting is co-sponsored by the Astrodynamics Technical Committee of the American Institute of Aeronautics and Astronautics (AIAA) and by the Space Flight Mechanics Committee of the American Astronautical Society (AAS).

We greatly appreciate the wide distribution of this announcement to other colleagues that may be interested, and we look forward to your participation. Manuscripts are solicited on topics related to space flight mechanics and astrodynamics, including, but not limited to:

- Asteroid and interplanetary missions
- Atmospheric re-entry guidance and control
- Attitude dynamics, determination, and control
- Attitude-sensor and payload-sensor calibration
- Cislunar astrodynamics
- Dynamical systems theory for space flight
- Earth orbital and planetary mission studies
- Low thrust trajectories
- Machine learning and artificial intelligence applied to space flight problems
- Multibody dynamics and trajectory design
- Orbit determination and estimation
- Orbital debris and space environment
- Orbital dynamics, perturbations, and stability
- Rendezvous, relative motion, proximity operations, and docking
- Satellite constellations and formations
- Space autonomy and space robotics
- Space Situational Awareness (SSA) conjunction analysis and collision avoidance
- Trajectory/mission/maneuver design and optimization
- In-Space Servicing, Assembly, and Manufacturing (ISAM)

Manuscripts will be accepted based on the quality of the extended abstract, the originality of the work and/or ideas, and the anticipated interest in the proposed subject. Submissions that are based on experimental results or current data, or that report on ongoing missions, are also of interest. Contributions from industry, government, and academia are all encouraged. Papers are also encouraged that include multidisciplinary efforts, as well as international collaborations. Complete manuscripts are required before the conference. English is the working language for the conference. Additional and up-to-date information can be found at the conference website https://www.aiaa.org/scitech/. This website also links to the abstract and manuscript submission process, which can be accessed via the *Presentations & Papers* link.





INFORMATION FOR AUTHORS

Extended abstracts received by the deadline of May 22, 2025 will be reviewed by a team of reviewers appointed by the program committee and considered for acceptance by the conference organizing committee. Detailed author instructions will be sent by email after acceptance. By submitting an abstract, the author affirms that the manuscript's majority content has not been previously presented or published elsewhere.

Authors may access the web-based submittal system using the link available via the official website https://www.aiaa.org/scitech/. Authors are expected to provide:

- 1. A paper title, as well as the name, affiliation, postal address, telephone number, and email address of the corresponding author and each co-author
- 2. An extended abstract in the Portable Document File (PDF) format of **at least 1,000 words** that includes the title and authors; provides a clear and concise statement of the problem to be addressed; the proposed solution method; the results expected or obtained; and an explanation of its significance to astrodynamics and/or space-flight mechanics, with pertinent references and supporting tables and figures as necessary. The authors are requested to provide sufficient detail in the extended abstract to aid the reviewers in making an accurate assessment of the potential of the contributions, the originality of the work and/or ideas, and the anticipated interest in the proposed subject.
- 3. A condensed abstract (100 words) that is to be directly typed into the text box provided on the web page and avoids the use of special symbols or characters, such as Greek letters.

Foreign contributors requiring an official letter of acceptance for a visa application should contact the Technical Chairs by email at their earliest opportunity following paper acceptance.

Technology Transfer Notice – Technology transfer guidelines substantially extend the time required to review abstracts and manuscripts by private enterprises and government agencies. To preclude late submissions and withdrawals, it is the responsibility of the author(s) to determine the extent of necessary approvals prior to submitting an abstract.

No-Paper/No-Presentation Policy – A complete manuscript must be electronically uploaded to the website prior to the conference in PDF format. The manuscript shall be no more than twenty (20) pages in length and conform to the AIAA SciTech manuscript format. If a complete manuscript is not received on time, then its presentation at the conference shall be forfeited. If a presentation is not made by an author at the conference, then the manuscript shall be omitted from the published proceedings.

Questions concerning the submission of manuscripts should be addressed to the technical chairs:

AIAA Technical Chair

Dr. Jennifer Hudson Naval Postgraduate School jennifer.hudson@nps.edu **AAS Technical Chair**

Dr. Eleonora Botta University at Buffalo ebotta@buffalo.edu