

CALL FOR PAPERS
The 2021 AAS/AIAA Astrodynamics Specialist Conference
Big Sky Resort – Big Sky, Montana
ABSTRACT DEADLINE: April 30, 2021

https://www.space-flight.org/docs/2021_summer/2021_summer.html

Coronavirus (COVID-19) Update

The AAS/AIAA 2021 Astrodynamics Specialist Conference (August 8-12, 2021) will be held virtually.

All of the organizing committee members were hoping to hold this event in person, however there are several specific reasons we cannot do so this summer. Principally, our colleagues at NASA, several universities, many private companies, and other institutions have either heard specifically that they will not be able to travel until after the conference date, or that there is still great uncertainty regarding when travel restrictions will be lifted. Further, given that international travel is not yet normalized (or possible, in many cases), even more significant hurdles exist for our colleagues who would be traveling from outside the United States. To enable full participation by all members of our community, we will hold a virtual event.

The abstract submission portal is open at http://space-flight.org/docs/2021_summer/2021_summer.html and will continue to accept submissions through **April 30, 2021**. We encourage you to participate and connect with the community via this virtual event.

The 2021 AAS/AIAA Astrodynamics Specialist Conference, hosted by the American Astronautical Society (AAS) and co-hosted by the American Institute of Aeronautics and Astronautics (AIAA) will be held August 8 - 12, 2021. This conference is organized by the American Astronautical Society (AAS) Space Flight Mechanics Committee and co-sponsored by the American Institute of Aeronautics and Astronautics (AIAA) Astrodynamics Technical Committee. Manuscripts are solicited on topics related to space-flight mechanics and astrodynamics, including but not necessarily limited to:

- Asteroid and non-Earth orbiting missions
- Atmospheric re-entry guidance and control
- Attitude dynamics, determination and control
- Attitude-sensor and payload-sensor calibration
- Dynamical systems theory applied to space flight problems
- Dynamics and control of large space structures and tethers
- Earth orbital and planetary mission studies

- Flight dynamics operations and spacecraft autonomy
- Orbital dynamics, perturbations, and stability
- Orbit determination and space-surveillance tracking
- Orbital debris and space environment
- Rendezvous, relative motion, proximity missions, and formation flying
- Reusable launch vehicle design, dynamics, guidance, and control
- Satellite constellations
- Spacecraft guidance, navigation and control (GNC)
- Space Situational Awareness (SSA), Conjunction Analysis (CA), and collision avoidance
- Trajectory / mission / maneuver design and optimization
- Technology Anniversary: Lessons Learned and Impact
- History of Astrodynamics: Review of seminal astrodynamical, theoretical and practical developments

SPECIAL SESSIONS

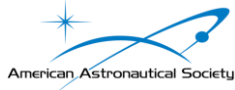
Proposals are being considered for suitable special sessions, such as a session theme and topical panel discussions. A proposal for a panel discussion should include the session title, a brief description of the discussion topic(s), and a list of the speakers and the qualifications. For a themed session a proposal should include the session title, a brief description, and a list of speakers and paper titles. Prospective special session organizers should submit their proposals to the Technical Chairs. Once the special sessions are available in the online system, authors will be allowed to indicate on the abstract submission if you would like to be considered for inclusion in this special session. Manuscripts not selected for this special session will be allocated to other relevant sessions.

BREAKWELL STUDENT TRAVEL AWARD

The AAS Space Flight Mechanics Committee announces the John V. Breakwell Student Travel Award. This award provides travel expenses for up to four (4) U.S. and Canadian students presenting at the conference. The travel award applications have the same due date as the extended abstracts unless otherwise noted on the conference Call for Papers. Students will get monetary support (up to \$1000) to attend the conference depending upon the conference format. Details and applications may be found on the conference website.

INFORMATION FOR AUTHORS

Because the submission deadline of **April 30, 2021** has been fully extended for the convenience of contributors, there are no plans to defer this deadline due to the constraints of the conference planning schedule. Notification of acceptance will be sent via email by May 21, 2021. Detailed author instructions will be sent by email following 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 abstract submittal system using the link available via the official website <http://www.space-flight.org>. During the online submission process, 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 500 words that includes the title and authors; provides a clear and concise statement of the problem to be addressed; the proposed method of solution; 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
3. A condensed abstract (100 words) to be included in the conference program. This is directly typed into the text box provided on the web page and avoids the use of special symbols or characters, such as Greek letters.

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-Podium Policy. A complete manuscript must be electronically uploaded to the website prior to the conference in PDF format, be no more than twenty (20) pages in length, and conform to the AAS 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.

We greatly appreciate the wide distribution of this announcement to other colleagues that may be interested, and we look forward to your participation.

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

AAS Technical Chair

Dr. Paul F. Thompson
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AIAA Technical Chair

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All other questions should be directed to the General Chairs:

AAS General Chair

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