

IAA/UT Space Traffic Management Conference

February 28 – March 2, 2023

The University of Texas at Austin

Austin TX, USA

Call For Papers

The International Academy of Astronautics (IAA)

The University of Texas (UT)

The [Space Security, Safety, and Sustainability](#) (SSSS) Program at The University of Texas at Austin's (UT) [Strauss Center for International Security](#) and Law and the Cockrell School of Engineering, in partnership with the International Academy of Astronautics (IAA), will hold the 9th annual Space Traffic Management conference, "Achieving Space Environmentalism and Sustainability by Creating a Circular Space Economy." The conference will take place on February 28 – March 2, 2023, hosted at The University of Texas at Austin, USA (and livestreamed for viewing only via Zoom webinar). Experts from all over the world will gather to discuss and exchange on Space Traffic Management. Technical sessions will be devoted to several topics like Range Management, Airspace/Orbital Space Integration, Space Safety and Sustainability, Security, Space Environment Effects and Impacts and Related Issues.

Papers are solicited, aligned with this year's theme, in the areas listed below:

1. Range Management

- a. Commercial, Civil, and Military Range Safety Continuity
- b. Security issues including cyber
- c. Range Technology Modernization

2. Airspace/Orbital Space Integration

- a. High Altitude Balloon impact upon the Airspace
- b. Impacts of Microsatellites upon the Airspace
- c. Integration of Air Traffic and Space Traffic Control Systems
- d. Communication Standards for Space Traffic

3. Space Safety and Sustainability

- a. Anthropogenic Space Object Taxonomy and Classification to Aid Regulation and Space Traffic Management
- b. Space debris remediation, mitigation, and SSA technologies
- c. Unique Anthropogenic Space Object Identification and how to achieve it
- d. Space Object and Event Data Curation, Sharing, and Exploitation
- e. Multi-Source Information Fusion, Artificial Intelligence, and Machine/Deep Learning
- f. Spacecraft Anomalies, Mission Assurance, and Causal Relationships
- g. Impacts upon spectrum management and Radio Frequency Interference (RFI)
- h. Monitoring Space Object and Event Behaviors (including assessing compliance)
- i. Decision-making with incomplete and biased information
- j. International initiatives

4. Security

- a. UN Prevention of an Arms Race in Outer Space (PAROS) and the Conference on Disarmament
- b. Military Uses of Outer Space
- c. Dual-Use and Multi-Use Technology Challenges
- d. Commercialisation of military space services
- e. Defining “attack” or “use of force” in space
- f. Counterspace capabilities
- g. Verification in space
- h. Anti-satellite testing and demonstrations
- i. Electronic warfare in space
- j. Cyber and space security challenges
- k. Dedicated military space agencies (space force, space corps)
- l. International initiatives
- m. National space defence policies
- n. International humanitarian law in space

5. Space Environment Effects and Impacts

- a. Resultant Anthropogenic Space Object Behavior and Discovering These from Big Data
- b. Launch and Space Flight Meteorology
- c. Space Weather forecasting

6. Related Issues

- a. Role of human factors in STM
- b. Industry’s role
- c. Industry requirements
- d. International initiatives and concerns
- e. Standards inflection points and development

ABSTRACT SUBMITTAL:

Abstracts of up to 250 words are invited to apply and must include the precise title of the paper, the topic area of interest, the author’s full name and affiliation, and complete contact information including an email address. The language of the conference is English. Technical paper abstracts in the areas described above or related to Space Traffic Management will be accepted electronically through the conference email iaastm@iaaemail.org beginning September 26, 2022. Please be sure to designate the topic area your paper addresses (see topics listed above), and whether you will attend in person (preference will be given to those attending live). **The deadline for receipt of abstracts is December 16, 2022.** The abstract template is available on the conference website.

FINALIST REQUIREMENTS:

For those whose abstracts are selected, there will be two types of live presentations: (a) sessions and (b) panels:

Session presenters should be available to do the following:

- (1) Submit a draft paper by the below deadline
- (2) Pre-record a max 15-minute video on their paper which will be due before the conference
- (3) Be available for a live Q&A panel one of the days of the conference (45-minute max) [note that if you cannot attend in person, we will be unable to have you join the conference for your session live and will refer attendees to your video on our websites] and

(4) Finalize papers as applicable.

Panelists will need to:

- (1) Submit a max 700-word op-ed on the topic of their panel due before the conference, and
- (2) Be available for a live Q&A panel one of the days of the conference (45-minutes) [note that if you cannot attend in person, we will be unable to have you join the conference for your session live but you will be able to submit a 15-minute max video on our websites].

VENUE:

This year's conference (in person and livestreaming for viewing only) will be held at The University of Texas at Austin TX, USA and virtually via a Zoom webinar. **Please note that you must use the Zoom account with the email address you registered with on the IAA website to be able to log in to this webinar.**

KEY DATES:

September 26, 2022:	Call for Papers
December 16, 2022:	Abstract submission deadline
January 9, 2023:	Registration opens
January 16, 2023:	Final abstracts selected and invitations extended
February 1, 2023:	Preliminary program available
February 20, 2023:	Draft papers due and published to IAA's website
February 28 - March 2, 2023:	Conference

CONFERENCE WEBSITE:

For more detailed information, please visit the IAA website at:
<https://iaaspace.org/stm>

or contact Ali Prince at ali.prince@austin.utexas.edu