



The International Academy of Astronautics (IAA) The University of Texas (UT)

Call for Papers

The Strauss Center and Cockrell School of Engineering at The University of Texas at Austin (UT) and the International Academy of Astronautics (IAA), in association with the United Nations Institute for Disarmament Research (UNIDIR), are pleased to invite you to submit an abstract for the Space Traffic Management Conference to be held on February 19-20, 2020 in Austin TX, USA. 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 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. Resident Space Object Taxonomy and Classification to Aid Regulation and Space Traffic Management
- b. Space debris remediation, mitigation, and SSA technologies
- c. Unique Resident Space Object Identification (URSOI) 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 Resident 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

ABSTRACT SUBMITTAL:

Abstracts of up to 250 words are invited and must indicate the precise title of the paper, the 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 October 15, 2019. Please be sure to designate the topic area your paper addresses (see topics listed above). The deadline for receipt of abstracts is December 15, 2019. Abstract template is available online.

VENUE:

The University of Texas at Austin (UT), James J. and Miriam B. Mulva Conference Center,
EER building 2501 Speedway, Austin, TX 78712, USA Tel 1 512-471-0717
<https://www.strausscenter.org/space-security>

KEY DATES:

October 1 st , 2019:	Save the Date announcement
October 11 th , 2019:	Call for Papers & 1 st Announcement
December 15, 2019:	Abstract submission deadline
January 1 st , 2020	Opening of Registration
January 20 th , 2020:	2 nd Announcement & Preliminary Program
February 19-20, 2020:	Conference

CONFERENCE WEBSITE:

For more detailed information, please visit the IAA website at:
<https://iaaweb.org/content/view/787/1037/>