STINT 2019

Fundamental
August 8-9
Nanjing, China

Hosted at Nanjing
University campus

Applied
July 30-August 1
Pasadena, CA, USA

Co-located with
IEEE SMC-IT 2019

Sponsors:

NANJING UNIVERSITY

CSA CHINESE SOCIETY OF ASTRONAUTICS

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COMMUNICATE BEYOND FRONTIERS

Steering Commitee:
Edward J. Birrane, APL, USA
Scott C. Burleigh, JPL, USA
Juan A. Fraire, CONICET, Argentina
Marius Feldmann, TUD, Germany
Nelli Mosavi, APL, USA

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2019

Space-Terrestrial Internetworking Fundamental Research (STINT-FR) Workshop

Call for Papers

Steering Committee:

Edward J. Birrane (APL), Juan A. Fraire (CONICET), Scott Burleigh (JPL), Marius Feldmann (TUD), Nelli Mosavi (APL).

Workshop Scope and Overview

The Space-Terrestrial Internetworking (STINT) Workshops addresses emerging technical topics related to data exchange between and amongst space-based and terrestrial network nodes. Such communications systems accept space assets as first-class nodes performing common network functions including stateful packet inspection, routing, management, and security.

Bringing together some of the most influential members of the field of data transfer between space and terrestrial nodes via delay-tolerant networks with time-varying topologies, STINT seeks contributions with a clear focus on packetized, multi-path, and multi-hop data exchange between and among space-based and terrestrial (plus planetary) network nodes.

The fundamental research version of the Space-Terrestrial Internetworking workshop (STINT-FR) focuses on efforts discussing the solution of general, theoretical problems seeking to expand the knowledge and understanding in the fundamentals of space-terrestrial networking.

Full research papers are solicited for the protocols, applications, and operational concepts required to make these internetworks both technically feasible and operationally deployable. Specifically, STINT welcomes researchers and practitioners in the following areas.

- Modeling and Dynamics of Mobile Space-Based for Optical\RF Networks
- Autonomous Configuration and Control of Network Nodes
- Protocols, Applications, and Concepts for Network Management
- Adaptive Networking Technologies (e.g., SDN, ICN)
- Delay and Disruption Tolerant Networking
- Store-and-Forward Routing, Congestion Control, and Topological Synchronization
- Deep Space Networks and the Solar System Internet
- End-to-end Security Services Across an Internetworking Overlay
- Commercial/Scientific/Government Mission Concepts Enabled by Internetworks
- Optical Network Availability, Resilience and Survivability
- Optical Network Using Photonic Integrated Circuits
- Optical Time and Frequency Transfer

Format and Submission Instructions

STINT-FR follows the guidelines for paper and poster submissions listed below.

- Full papers (up to 6 pages) with a verbal presentation are considered.
- Papers must be written in English and prepared in Portable Document Format (PDF).
- Papers must be formatted according to the standard IEEE two-column format with single-spaced, ten-point font text, as given in the IEEE templates.
- All figures, tables, references etc. are included in the page limit.
- All fonts must be embedded into the PDF file.
- All papers must be submitted online at a link that will be posted soon.

Organizing Committee

- General chair:
    - Prof. Zhongfeng Wang, IEEE Fellow, Nanjing University
- Technical program chair:
    - Prof. Kanglian Zhao, Nanjing University
    - Dr. Tomaso De Cola, German Aerospace Center (DLR)
- Local organization chair:
    - Wenfeng Li, Associate Researcher, Nanjing University.
- Publication chair:
    - Prof. Juan A. Fraire, Assistant Researcher, CONICET-UNC.