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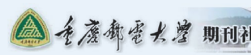
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Special Session 2: Key Technologies for Mobile Phones directly connect to Satellites

August 25th, 2022. T-Mobile announced a partnership with Space X to launch the "mobile phone directly connects to satellite" program, which aims to provide Internet access to mobile users in parts of the United States via Starlink satellites. At the same time, Huawei, Apple and other companies have announced that their flagship phones will support direct satellite connection, which making mobile phones support for satellite communications a new selling point. However, at present, mobile phones can only support short message service. How to provide mobile broadband services for mobile phones through low-orbit satellites will become a hot research direction in the future. February 23th, 2023. The FCC has published a draft for comments on new rules for Supplemental Coverage from Space (SCS), which allow satellite operators to use ground-based mobile communications spectrum to operate satellites. The new rules published by FCC will promote the convergence of satellite and ground-based networks. In addition, the design of mobile phone technology follows the technical specification of 3GPP. 3GPP has preliminarily demonstrated the feasibility of 5G NR application in NTN, and has begun to carry out further enhancement technology research for various vertical application scenarios of NTN network. For such reason, we are organizing the Special Section of "Key Technologies for Mobile Phones directly connect to Satellites", in an effort to bring together researchers from academia and industry around the world to share the most recent progresses in advanced technology applications and scientific problems related to all aspects of mobile phones directly connect to satellites.

Topics of interest include but not limited to:

- ▶ 5G NR Integrated Satellite Access Network Architecture and Protocol
- ▶ Multi-antenna Satellite System Channel Modeling
- ▶ Space-ground Spectrum Sharing
- ▶ Satellite Semantic Communication
- ▶ Advanced Channel Coding Theory and Technology
- ▶ Advanced Satellite Transmission Waveform and Multiple Access Technology
- ▶ Satellite Access Node and User Equipment Antenna Design, Manufacturing and Measurements
- ▶ AI based Satellite Components and Systems Optimization
- ▶ Satellite Signal Processing
- ▶ Satellite IoT Random Access
- ▶ Satellite Beam Management and Physical Resource Scheduling
- ▶ Satellite Mobility Management
- ▶ Satellite Digital Simulation, Demonstration, in-orbit Test System Other Satellite Theory and Techniques

For more information, please visit: <http://www.iccsn.org/ss2.html>

Organizers

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Invited Speakers

- ▶ Assoc. Prof. Shu Fu, Chongqing University, China
- ▶ Assoc. Prof. Ke Wang, Beijing University of Posts and Telecommunications, China
- ▶ Assoc. Prof. Danshi Wang, Beijing University of Posts and Telecommunications, China
- ▶ Jinlong Liu, NI (Head of NI Asia-Pacific SATCOM and 5G/6G NTN Business)
- ▶ Assoc. Prof. Chen Zhang, Nanjing University of Posts and Telecommunications, China

Publication

Special session accepted full papers after peer review will be included into **ICCSN 2023 Conference Proceedings** and indexed by **Ei Compendex** and **Scopus**, etc. after conference.

ICCSN Conference has very credible publication index records.
ICCSN 2022 - ISBN: 978-1-6654-5328-8 | IEEE Xplore Online | Ei-Compendex & Scopus Index

ICCSN 2021 - ISBN: 978-1-7281-9814-9 | IEEE Xplore Online | Ei-Compendex & Scopus Index

ICCSN 2020 - ISBN: 978-1-7281-9814-9 | IEEE Xplore Online | Ei-Compendex & Scopus Index

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ICCSN 2009 - ISBN: 978-0-7695-3522-7 | IEEE Xplore Online | Ei-Compendex & Scopus Index

Important Dates

Full Paper Submission Deadline	June 10, 2023
Notification of Review Result	June 20, 2023
Camera-Ready / Registration Deadline	June 25, 2023

Submission Method

- ▶ Full Paper Submission:
<http://www.easychair.org/conferences/?conf=iccsn2023>
Please Select Track: Special Session 2: Key Technologies for Mobile Phones directly connect to Satellites to Submit
- ▶ Abstract Submission: iccsn_conference@163.com

General Conference Schedule

Day 1, July 21 10:00-17:00	Sign in and Collect Conference Materials
Day 2, July 22 09:00-12:00	Opening Ceremony and Keynote Speeches
	13:30-18:30 Parallel Sessions
	19:00-20:30 Conference Banquet
Day 3, July 23 09:00-12:00	Parallel Sessions
	13:30-15:30 Parallel Sessions