

# Call For Papers

**Special Session:** Integrating Aerial Base Stations into 5G and Beyond

**Conference:** The 2023 International Conference on Cyber-physical Social Intelligence (ICCSI)

**Date:** October 20-23, 2023

**Meeting mode:** In-person

**Location:** Xi'an, China

**Web site:** <https://agist.org/iccsi2023>

Aerial base stations (ABSs) are expected to be important supplementary components for the 5G-and-beyond (B5G) communication systems to achieve global Internet of Everything. In the face of future demand for wide-area smart connectivity and global random access, B5G networks will present a breakthrough in key technologies, including network architecture and air interface, to build an air-to-ground (A2G) integrated communication system. Especially, due to the seamless connectivity and high data rate, ABS-enabled B5G networks have been viewed as a key element to bring real-time, higher-capacity communication and wider coverage in the connection and deployment of a plethora of applications such as smart grids, maritime communications, emergency communications, wireless sensor networks, and vehicular ad-hoc networks. Motivated by the above, the workshop on Integrating Aerial Base Stations into 5G and Beyond will deal with different aspects of A2G communications, covering the entire field of ABS-enabled B5G networks.

***Interested topics include (but not limited to):***

- Network architectures and protocols for A2G communications
- Access and backhaul management strategies
- Channel measurement and modeling for A2G links
- Position and trajectory optimization for aerial nodes
- Energy-efficient wireless coverage for ABS-enabled B5G networks
- Implementation/testbed/deployment of A2G communications
- Aerial networks supported emergency communications
- Machine learning for A2G communications
- Integration of ABS-enabled B5G networks with state-of-the-art wireless technologies (e.g., NOMA, backscatter communication, reconfigurable intelligent surfaces, massive MIMO, physical layer security, millimeter-wave communication, cognitive radio, cooperative communication, energy harvesting)

## **Important Dates:**

March 31, 2023,	Letter of intent for paper contribution
May 15, 2023,	Full paper submission
July 1, 2023,	Acceptance/Rejection notification
August 31, 2023,	Final camera-ready papers due

## **Special Session Co-chairs:**

Prof. Dawei Wang (Northwestern polytechnical University, China), email [wangdw@nwpu.edu.cn](mailto:wangdw@nwpu.edu.cn)

Dr. Yixin He (Jiaxing University), email [YixinHe\\_zjxu@outlook.com](mailto:YixinHe_zjxu@outlook.com)

*All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above*