Sustainable Communications for Renaissance

Call for Papers

5th Workshop on Orbital Angular Momentum Transmission(OAMT 2023)

SCOPE

As the independent physical resource in electro-magnetic wave, Orbital Angular Momentum (OAM) can provide new dimension for wireless communication, which serves as one of the potential key technologies for B5G and 6G mobile communications. With the exhaustion of frequency resources, additional multiplexing and higher spectrum efficiency can be achieved with the introduction of OAM. In addition, the fundamental theoretical study of OAM has already been engaged in quantum mechanics for a long time. Many researchers in the vortex electron show promising technology in OAM photon radiation and reception, e.g., relativistic electron cyclotron radiation, electron cyclotron masers and vortex electrons sorter. Besides, information theory with the introduction of OAM is also paid more attention. Therefore, the 5th workshop on OAM transmission in ICC 2023 will focus on both the detailed physical theories of OAM and applications in wireless communications.

TOPICS OF INTEREST

We seek original completed and unpublished work not currently under review by any other journal/ magazine/conference. Topics of interest include, but are not limited to:

- OAM multiplexing transmission in backhaul system
- OAM antenna design
- OAM wave long distance transmission
- OAM modulation and coding
- OAM detection device and sensor
- Information theory with OAM
- Secure communication with OAM
- MIMO transmission with OAM
- Optical OAM in fiber and in free space
- Satellite and space communications with OAM
- Quantum theory of OAM photons/microwave photons
- Vortex electrons and sorters
- OAM detection and estimation
- Quantum key distribution with OAM
- OAM multiplexing and its extension to multishape radio

PAPER SUBMISSION

All papers for Workshops should be submitted via EDAS.
Full instructions on how to submit papers are provided on the IEEE ICC 2023 website:
https://icc2023.ieee-icc.org/

GENERAL CHAIR
Prof. Chao ZHANG
(Tsinghua University, China)
zhangchao@mail.tsinghua.edu.cn

WORKSHOP CO-CHAIRS
Dr. Doohwan LEE
(NTT Corporation, Japan)
Prof. Moretti MARCO
(University of Pisa, Italy)

CONTACT SECRETARY
Mr. Yuanhe WANG
(Tsinghua University, China)
Wang-yh19@mails.tsinghua.edu.cn

IMPORTANT DATES

Paper Submission Deadline:
20 January 2023
Paper Acceptance Notification:
6 March 2023
Camera Ready and Registration for accepted papers:
15 March 2023

WEBPAGE LINK
icc2023.ieee-icc.org