



Workshop on Orbital Angular Momentum Transmission (OAMT)



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Important Dates

Submission Deadline:

January 20, 2022

Notification of Acceptance:

March 06, 2022

Camera-Ready Papers:

March 15, 2022

Submission link

<https://edas.info/N28800>

Webpage link

<https://icc2022.ieee-icc.org/program/workshops>

Scope

Orbital Angular Momentum (OAM) is regarded as one of the potential key technologies for B5G and 6G mobile communications, which can provide additional multiplexing and higher spectrum efficiency. For example, Tbps data rate is aimed with OAM channels multiplexed in the free space point-to-point backhaul transmission. In addition, the fundamental theoretical study of OAM has already been engaged in the quantum mechanics for a long time. Many researchers in the vortex electron show the promising technology in OAM photon radiation and reception, e.g., relativistic electron cyclotron radiation and electron cyclotron masers. Therefore, the 4th workshop on OAM transmission in ICC2022 will focus on both the detailed physical theories of OAM and applications in wireless communications. The workshop is expected to be held with the discussion of the state-of-the-art research on OAM transmission and the promising future applications.

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference.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**
- **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 photon**
- **Electron vortex beam**
- **OAM detection and estimation**
- **Quantum key distribution with OAM**

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2022 official website: <https://icc2022.ieee-icc.org/authors>