



IMC-5G

Atlanta, 2019

**IEEE MTT-S International Microwave Conference on
Hardware and Systems for 5G and Beyond**
August 15th- 16th, 2019
Atlanta, USA

CALL FOR PAPERS

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SCOPE

The current and future generations of wireless networks, 5G and beyond, will have profound technological and economic impacts on our society. These wireless technologies are expected to radically reshape many existing applications and create numerous new opportunities. There are yet countless challenges lying ahead, many of which are happening at the “Physical Layer”, due to several fundamental limitations imposed by the nature of electromagnetics or device physics and practical constraints from economics, engineering, technologies, and application considerations. Consequently, significant research is required to bring 5G communications to reality. The IEEE IMC-5G 2019 conference provides a focused forum to bring together researchers and practitioners from different backgrounds to share the most recent advances in hardware and system technologies for 5G and beyond.

IMC-5G 2019 will feature a two-day archival series of oral and poster presentations (in IEEE Xplore) with invited talks and tutorials. An industrial exhibit featuring a selection of state-of-the-art wireless and microwave products, measurement instruments and CAD software tools will also be held. The participation of young researchers and postgraduate students is strongly encouraged. Best Student Papers and Young Researcher Travel Grants are available.

TOPICS

Technical contents include, but not limited to, the following areas:

- 5G RF/millimeter-wave transceiver architectures
- High efficiency and broadband power amplifiers
- Antennas, antenna arrays, and passive components/networks
- Integrated front-end modules and mixed-signal ICs
- Large-scale phased-array, beamformers, MIMO antennas
- Signal generation, modulation and frequency conversion
- Reconfigurable circuit elements, filters, multiplexers
- IoT sensors, RFID circuits/chips for 5G applications
- RF/Microwave devices/circuits/system modelling/characterization
- Energy harvesting, wireless power transfer circuits
- Nonlinear circuit/system analysis and simulation tools
- Emerging technologies, such as silicon photonics, security, AI/ML for wireless hardware, etc.

IMPORTANT DATES

Abstract Submission Deadline:

April 29th, 2019

Notification of Acceptance:

June 17th, 2019

Final Manuscript Due:

July 15th, 2019

Conference Date:

August 15th-16th, 2019

SUBMISSIONS

Prospective authors are invited to submit a **three-page** extended abstract in PDF before the Abstract Submission Deadline. All papers must be written in English, and submitted electronically on the conference website.

All submissions will be peer-reviewed. Authors of accepted contributions should provide a full-length (three-page) final version of their paper before the Final Manuscript Submission Deadline. The final version of the paper will be published in the conference proceedings as well as submitted for inclusion in **IEEE Xplore Digital Library** provided it has been presented at the conference.

Presented 2019 IMC-5G papers are eligible for extended journal publications in a special mini-issue of the IEEE Transactions on Microwave Theory and Techniques (T-MTT). All the extended journal submissions will go through the T-MTT peer review process.

