

IMS2023 Paper Competitions

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The IEEE Microwave Theory and Technology Society (MTT-S) International Microwave Symposium (IMS), flagship conference of the MTT-S, hosts several paper competitions. For all competitions, the submitted papers will be reviewed under the same double-blind process as regular papers. Papers that are accepted by the Technical Paper Review Committee (TPRC) for the conference will then be ranked as a part of the individual com-



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petitions review processes to determine the finalists. Each TPRC subcommittee can nominate up to two papers. After checking formal eligibility, these papers were additionally screened by a panel of judges to pick the 10 best papers as IMS SPC finalists. The list of finalists will be published in March on the IMS website. At the IMS, the SPC finalists will hold full-length 20-min oral presentations in their respective technical sessions. The winner will be selected by a panel of judges based on the performance of the presentation and quality of the Q&A. The first-, second-, and third-place awards will be presented at the IMS2023 closing ceremony on Thursday, 15 June.

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Student Paper Competition

The long-standing Student Paper Competition (SPC) honors the three best technical papers presented by students at the IMS in San Diego, California. This year, 354 student authors submitted a paper to the IMS, indicating their interest in participating in the competition. These submissions were first subject to the regular IMS paper selection process, organized in

Early Career Paper Competition

The purpose of the Early Career Paper Competition is to recognize outstanding technical contributions from early career professionals. Paper submissions with multiple authors are permitted, but the first author must be an individual who is not a full-time student or a faculty member and has fewer than 10 years of professional experience. The eligible paper can come



Figure 1. The best industry paper was “A 50 W CW 1-6GHz GaN MMIC Power Amplifier Module With Greater Than 30% Power Added Efficiency,” by Michael Roberg, Jason Zhang, Robert Flynt, and Matthew Irvine from Qorvo Inc. [1].



Figure 2. The winning advanced practices paper was entitled “Deep Learning Enabled Inverse Design of 30–94 GHz Psat, 3dB SiGe PA Supporting Concurrent Multiband Operation at Multi-Gb/s,” by Zheng Liu, Emir Ali Karahan, and Kaushik Sengupta from Princeton University [2].



Figure 3. The winners of the SPC were (first place) Zachary Schaffer, Carnegie Mellon University, for “33 GHz Overmoded Bulk Acoustic Resonator” [3], (second place) Ping-Keng Lu, the University of California, Los Angeles, for “860 μ W Terahertz Power Generation From Graded Composition InGaAs Photoconductive Nanoantennas” [4], and (third place) Ting Zheng, the Georgia Institute of Technology, for “Fused-Silica Stitch-Chips With Compressible Microinterconnects for Embedded RF/Mm-Wave Chips” [5].

from any sector: industry, governmental agency, organizations/labs, and postdoctoral research. It will be judged on the quality, significance, impact, and novelty of the presented work. These papers will be reviewed in the same manner as all other contributed papers, and the prize will be awarded based on both content and presentation. Judging will be performed by a specially formed committee of experts. The winner will be announced and an award will be presented during the closing session of IMS2023.

Industry Paper Competition

Authors from industry are encouraged to submit papers to IMS2023 and to indicate during the submission process the desired participants in the Industry Paper Competition (IPC). An industry paper is one that describes an innovation of a product or system application that potentially has the highest impact on an RF/microwave product and/or system, significantly benefiting the microwave community and society at large. A prize will be awarded to the author of the paper judged best in the category, which includes a free advertisement in *Microwave Journal* or *IEEE Microwave Magazine* for the author’s company. To qualify for consideration in the IPC, the authors must be affiliated with a corporate or private source, not a government or academic institution.

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Boot Camps at IMS2023 in San Diego, CA, USA (continued from page 108)

and the microwave control of quantum computing platforms.

The Quantum Boot Camp will introduce the basics of quantum engineering, targeting microwave engineers who want to understand how they can make an impact in this emerging field. It features speakers covering quantum

engineering basics with a focus on the design, fabrication, control, and measurement of quantum systems with a focus on superconducting qubits. The course will conclude with an industry perspective from one of the leading commercial providers of quantum computing.

The intended audience includes new engineers, engineers who may be changing their career path, and marketing and sales professionals seeking a better understanding of quantum technology as well as current college students looking to learn more about the practical aspects of quantum technology.



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Advanced Practice Paper Competition

An advanced practice paper is one that describes, in contrast to basic research, a practical RF/microwave design, integration technique, process enhancement, and/or combination thereof that results in significant improvements in performance and/or in time to production for RF/microwave components, subsystems, or systems. Any author can submit to this category. Judges will review the presentations of all finalists, whose identities at this point are known publicly, thereby choosing

a winner, who will be announced at the IMS Plenary Closing Session.

Congratulations to the winners of the IMS2022 student, industry, and advanced practice paper competitions in Figures 1, 2, and 3, respectively.

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