

Workshop on Channel Modeling and Propagation for Future Mobile Communications

Chengdu, China

19-22 October 2025

Steering Committee

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Important Dates

- Paper submission deadline
24 May 2025
- Acceptance notifications
15 July 2025
- Final paper submission
29 July 2025

Submission requirements

5-page paper (without overlength charge) and up to 2 additional pages are allowed with the purchase of additional page charges in the amount of \$100 USD per additional page at the time of registration and final paper submission.

Workshop website

Coming soon

Submission site

(will be open soon)

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Call for papers

Mobile communications are constantly evolving to meet society's demands for more and better communication services. The global rollout of the fifth-generation (5G) of mobile cellular communications is currently underway, with the promise of expanding the communications landscape by improving user experience with interactive and haptic communications, and enabling machine-oriented services that are fundamental for industry automation, intelligent transportation, e-health, and others. Although the future of 5G and beyond 5G (B5G) networks looks bright, the design of such networks continues to be a challenging task due to the stringent performance requirements that these networks should meet to deliver ultra-reliable and low-latency services with enhanced mobility. In particular, the optimization of the radio access network of 5G, as well as its redesign toward the transition to sixth-generation (6G) networks, call for the development of accurate channel models that capture the rapidly time-varying characteristics of mobile radio reception in highly mobile indoor and outdoor environments.

The 2025-Fall Workshop on Channel Modeling and Propagation for Future Mobile Communications is organized by the Technical Committee on Propagation of the IEEE Vehicular Technology Society with the aim of providing a global perspective on open problems, current research trends, new results and ideas, and hot topics in the area of channel modeling and propagation for enhanced mobility use cases of 5G, 5G-Advanced, 6G, and other mobile communication networks.

The Organizing Committee is inviting submissions of original, unpublished, high-quality research papers focused on (but not limited to) the following topics of interest:

- Modeling and simulation of highly time-varying channels for mobile communication systems based on standardized technology (e.g., 5G NR, 3GPP, and the like)
- Channel modeling and simulation for mobile communications based on optical signals (e.g., systems based on applications of the IEEE 802.17.7 standard in highly mobile scenarios)
- Modeling and simulation of nonstationary multipath fading channels
- Modeling and simulation of highly time-varying aerial communications channels
- Modeling and simulation of channels for railroad communications
- Channel modeling and simulation for maritime communications
- Measurement-based channel modeling and novel sounding techniques for mobile communications
- Hardware emulators for vehicle-to-vehicle and vehicle-to-infrastructure channels
- Propagation and channel modeling for integrated sensing and communications (ISAC)
- Evaluation of new frequency bands for mobile communications (e.g., THz)

Accepted papers will be published in the workshop proceedings and submitted to IEEE Xplore® as well as other Abstracting and Indexing databases.