

## Special Issue

# Delay-Doppler Domain Communications for Future Wireless Networks

### Message from the Guest Editors

Delay-Doppler (DD) domain communications have demonstrated appealing advantages in meeting the stringent requirements for future wireless communications. A typical example is the orthogonal time frequency space (OTFS) modulation that was proposed by Prof. Hadani et al. in 2017. The related design, analysis, and application of DD domain communications have received significant attention from both theoretical and practical viewpoints, where many recent advances have been reported. Those advances are usually built on the application of communication theory, signal processing, and information theory in the DD domain.

The distinct feature of DD domain wireless channels motivates many novel DD domain designs. Further progress on this front call for full exploitation on the DD domain channel, innovative adaption of conventional communication approaches, and improved understanding of communication theory, signal processing, and information theory. The main objective of this SI is to exploit the new opportunities of DD domain communications for future wireless networks by collecting new ideas, latest findings, state-of-the-art results, and comprehensive surveys of DD domain communications.

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### Guest Editors

Dr. Shuangyang Li

Prof. Dr. Zhiqiang Wei

Dr. Weijie Yuan

Prof. Dr. Baoming Bai

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### Deadline for manuscript submissions

closed (20 April 2024)



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*Entropy*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[entropy@mdpi.com](mailto:entropy@mdpi.com)

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue,  
Albany, NY 12222, USA

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