

# Special Issue

## Queueing Theory in 5G and Beyond: New Applications

### Message from the Guest Editor

Performance analysis, packet level control, and optimization tools for dynamic networks are essential for enabling various time-critical services in 5G and beyond. For example, the freshness of the status information of various physical processes collected by multiple sensors is a key performance enabler in many time-critical applications of wireless sensor networks. The traditional metrics, such as throughput and delay, can not fully characterize the information freshness. Information freshness concerns the cases of sampling a real-world random process and transmitting the samples to intended destinations; the key trade-off here is the balance between the frequency of sampling and delay in the delivery of the information. Queueing theory provides the tools and understanding for optimizing packet generation and packet management in networks. This Special Issue provides a platform for researchers from academia and industry to present their novel and unpublished work in the domain of the application of queueing theory in wireless networks.

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### Guest Editor

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### Deadline for manuscript submissions

closed (15 July 2023)



## Mathematics

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### Editor-in-Chief

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