

## Special Issue

# Quantum Key Distribution and Its Applications

### Message from the Guest Editor

This year marks the International Year of Quantum Physics. As one of the most advanced applications of quantum physics, quantum information science holds great promise for driving revolutionary advancements in communication, computing, and sensing, in which Quantum key distribution could provide a way to share key with unconditional security. At present, the application of QKD has reached a critical stage. However, its further development faces two major bottlenecks. The first lies in how to enhance key performance metrics, particularly under realistic noisy conditions. The second concerns the expansion of application paradigms. This Special Issue aims to focus on the recent developments and application in QKD. We welcome all papers related to quantum secure communication, QKD, post-quantum cryptography, and so on.

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### Guest Editor

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### Deadline for manuscript submissions

closed (10 February 2026)



## Entropy

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### Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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### Editor-in-Chief

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