



## Information-Theoretic Cryptography and Security

Guest Editor:

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Deadline for manuscript submissions:

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### Message from the Guest Editor

How to achieve the security of information-theoretic cryptography will be a problem of significant significance and challenge. This Special Issue aims to bring together recent research efforts that apply information theory to characterize and study the fundamental limits of cryptography and security. Possible topics include, but are not limited to, the following:

- Post-quantum cryptography including lattice-based cryptography, multivariate cryptography, hash-based cryptography, code-based cryptography, isogeny-based cryptography, and symmetric key quantum resistance, among others.
- Secure computation including secret sharing, secure multi-party computation, information-theoretic proof systems, randomness extraction and privacy amplification, differential privacy, and zero-knowledge proof, among others.
- Quantum technology including quantum information processing, quantum key distribution, and secret key agreement in quantum technology, among others.
- Physical layer security including secret key generation, physical layer authentication, secure communication, covert and stealthy communication, and secrecy capacity of communications channels, among others.





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## Editor-in-Chief

### **Prof. Dr. Kevin H. Knuth**

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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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