

## Special Issue

# Long-Distance Quantum Communications

### Message from the Guest Editors

Quantum Information science is at a crucial phase of becoming a technology. Recent advances in fiber-based, through-the-air, and satellite quantum key distribution (QKD), entanglement distribution, and quantum teleportation, as well as the tremendous progress in the development of quantum processing and quantum storage tools has brought us closer to full deployment of quantum technologies at large scales. Perhaps, one of the key required advancements is to improve the reach of quantum systems, especially those designed to enable secure communications in the quantum era. In this regard, systems such as quantum repeaters and satellite quantum communication have been proposed to achieve long-distance quantum communications. We would like to invite you to submit your original theoretical and/or experimental contributions to this Special Issue on long-distance quantum communications.

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### Guest Editors

Prof. Dr. Christoph Simon

Dr. Giuseppe Vallone

Dr. David Elkouss

Dr. Mohsen Razavi

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### Deadline for manuscript submissions

closed (30 September 2019)



## 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

Prof. Dr. Kevin H. Knuth

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