



Quantum Computing and Networking

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Message from the Guest Editors

Dear Colleagues,

Quantum computers such as IBM Q, Google Sycamore, and D-WAVE Advantage are built based on the phenomena of quantum superposition, quantum entanglement, and quantum tunneling. They perform computation on the basis of quantum bits or qubits. In contrast, traditional or classical computers perform computation on the basis of bits. A bit is either 0 or 1, but a qubit exists in a superposition of both 0 and 1, and only when measured does it clearly reveal the 0 or 1 state. Since the computing power of a quantum computer increases exponentially with the number of qubits, it has a computing power that cannot be surpassed by a classical computer, which is called quantum supremacy.

This Special Issue solicits submissions of papers related to quantum computing and quantum networking. The topics include but are not limited to quantum algorithms, quantum annealing algorithms, quantum-inspired algorithms, distributed quantum algorithms, quantum machine learning, quantum neural networks, quantum key distribution, quantum network routing, quantum network communication, and quantum network protocol designs, and quantum Internet of Things (QIoT).





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Message from the Editor-in-Chief

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