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## Quantum Control and Quantum Computing

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (31 January 2023)**

### Message from the Guest Editor

Fast and robust quantum control is of paramount importance for quantum computing and more generally quantum technologies. Various methods have become an integral part of modern quantum technologies, overcoming obstacles from systematic errors or environmental noise in intrinsically fragile hardware. This relationship between quantum control and quantum computing becomes deeper in that the hybrid quantum-classical algorithms are used to solve quantum control tasks, featuring machine learning optimization. On the other hand, the powerful and versatile tool of quantum control provides the richer ansatz for variational quantum algorithms, being greatly desired in industrial applications of quantum computing in today's noisy intermediate-scale quantum era. This Special Issue aims to consolidate and provide an open-access platform for publishing the latest results by researchers who are conducting research towards the above goals. Contributions on other relevant topics as well as review articles summarizing up-to-date achievements in the field are also very welcome.



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**Special** Issue



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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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