Special Issue

Quantum Computing for Complex Dynamics, 2nd Edition

Message from the Guest Editors

During the 1980s, physicists combined a quantum mechanical model with computer science, producing quantum computers. These quantum computers could perform much better than a classical computer. Since then, the research on quantum computation has been growing rapidly, both in architecture and algorithms. Complex dynamics are known for their complexity, chaos, and randomness, which widely exist in the field of cryptography, communication, chemistry, and so on. It is hard for classic computers to deal with complex dynamics, while quantum computers act as an ideal tool with which to calculate and simulate them. This Special Issue mainly focuses on the state of the art of the research on quantum computation and quantum algorithms, particularly that on the computation of the complex dynamics.

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