

## Chapman & Hall/CRC Quantum Computing Series

This book series is dedicated to one of today's most exciting fields of research and development that will change the way we are looking at the world. Quantum algorithms on a quantum computer will be faster because they can simultaneously encode many inputs of a problem and perform the calculation on all inputs in the time it takes to do one of the calculations classically.

The use of quantum co-processors for extensive and non-tractable computation routines in AI will lead to new machine learning and artificial intelligence applications. Clues from psychology indicate that human cognition is not only based on traditional probability theory as explained by Kolmogorov's axioms but additionally on quantum probability. Quantum cognition uses a mathematical quantum theory to model cognitive phenomena.

We are looking for a broad range of textbooks, references, and handbooks in the following areas:

- Quantum Computing
- Quantum Walks and Search Algorithms
- Quantum Machine Learning
- Quantum-Inspired Machine Learning
- Quantum Artificial Intelligence
- Quantum Robotics
- Quantum information processing
- Quantum Simulation
- Quantum Annealing
- Quantum Communication
- Quantum Cryptography
- Hybrid Quantum Systems
- Quantum Effects in Biology
- Quantum Cognition



We are also willing to consider other relevant topics that may be proposed by potential contributors.

### Series Editor:

Prof. Auxiliar Andreas Wichert  
Instituto Superior Técnico - Universidade de Lisboa

[andreas.wichert@tecnico.ulisboa.pt](mailto:andreas.wichert@tecnico.ulisboa.pt)

**Proposals for the series may be submitted to the series editor or directly to:**

**Randi Slack**, Publisher CS and IT ([randi.slack@informa.com](mailto:randi.slack@informa.com))

