Call for Chapters
Artificial Intelligence and Quantum Dynamics
for Memristor-System Computing

Edited volume (World Scientific Publishing Company), planned publication 2026

About the Book

This edited volume explores the fusion of emerging AI paradigms, quantum-inspired models, and memristor-system-based computing architectures. We invite contributions that present rigorous theory, algorithms, hardware/architecture co-design, and real-world applications across this rapidly evolving field.

Topics of Interest (including, but are not limited to):

- Memristor-based architectures for neuromorphic and quantum-inspired computing

- Quantum dynamics models for AI and hybrid systems

- AI algorithms tailored for memristive hardware (training, inference, optimization)

- Memristor-enabled quantum-inspired neural networks

- Hybrid AI–quantum–memristor computing models

- Machine learning with memristor crossbars and resistive RAM

- Energy efficiency, scalability, and fault tolerance in memristor-based AI systems

- Simulation frameworks for quantum–memristor dynamics

- Applications in signal processing, robotics, IoT, cryptography, and optimization

- Theoretical insights: nonlinear dynamics, chaos, and complex networks & systems in memristor–AI computing

Important Dates

- **Proposal submission (2–3 pages):** 31 December 2025
- **Notification of acceptance:** 31 January 2026
- **Full chapter submission:** 31 May 2026
- **Peer-review feedback:** 31 July 2026
- **Final manuscript due:** 31 August 2026
- **Publication:** October 2026

Submission Guidelines

- Submit a 2–3 page proposal (PDF) outlining scope, objectives, and relevance; include a brief abstract.
- Final chapters: 8,000–12,000 words, formatted according to the World Scientific author guidelines.
- All submissions undergo double-blind peer review.
- Submission: EasyChair - AI-QDM26 https://easychair.org/conferences?conf=aiqdm26.

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Publisher

World Scientific Publishing Company (WSPC)

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For proposals and inquiries, please contact any of the editors.

Why Contribute?
- One of the first comprehensive works bridging AI, quantum dynamics, and memristor computing.
- High visibility through the international distribution of the WSPC.
- Network with top researchers in AI hardware, neuromorphic computing, and quantum-inspired systems.

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