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Quantum Computing for Natural Sciences (with IBM Quantum)

Teaching Team: Max Rossmannek, Julian Schuhmacher, Alexander Miessen, and Laurin Fischer

Duration:	06.09.2023 - 26.09.2023
Language:	English
Teaching form:	Online Course

Course Topics:

- Simulating molecular dynamics on quantum computers
- Challenges and prospects of quantum simulation
- Common error sources and how to mitigate them
- Mapping the quantum description of molecules to the qubits of a quantum computer
- Computing ground state and excited state energies of molecules with quantum algorithms

CONFIRMATION OF PARTICIPATION

Potsdam, September 26, 2023

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