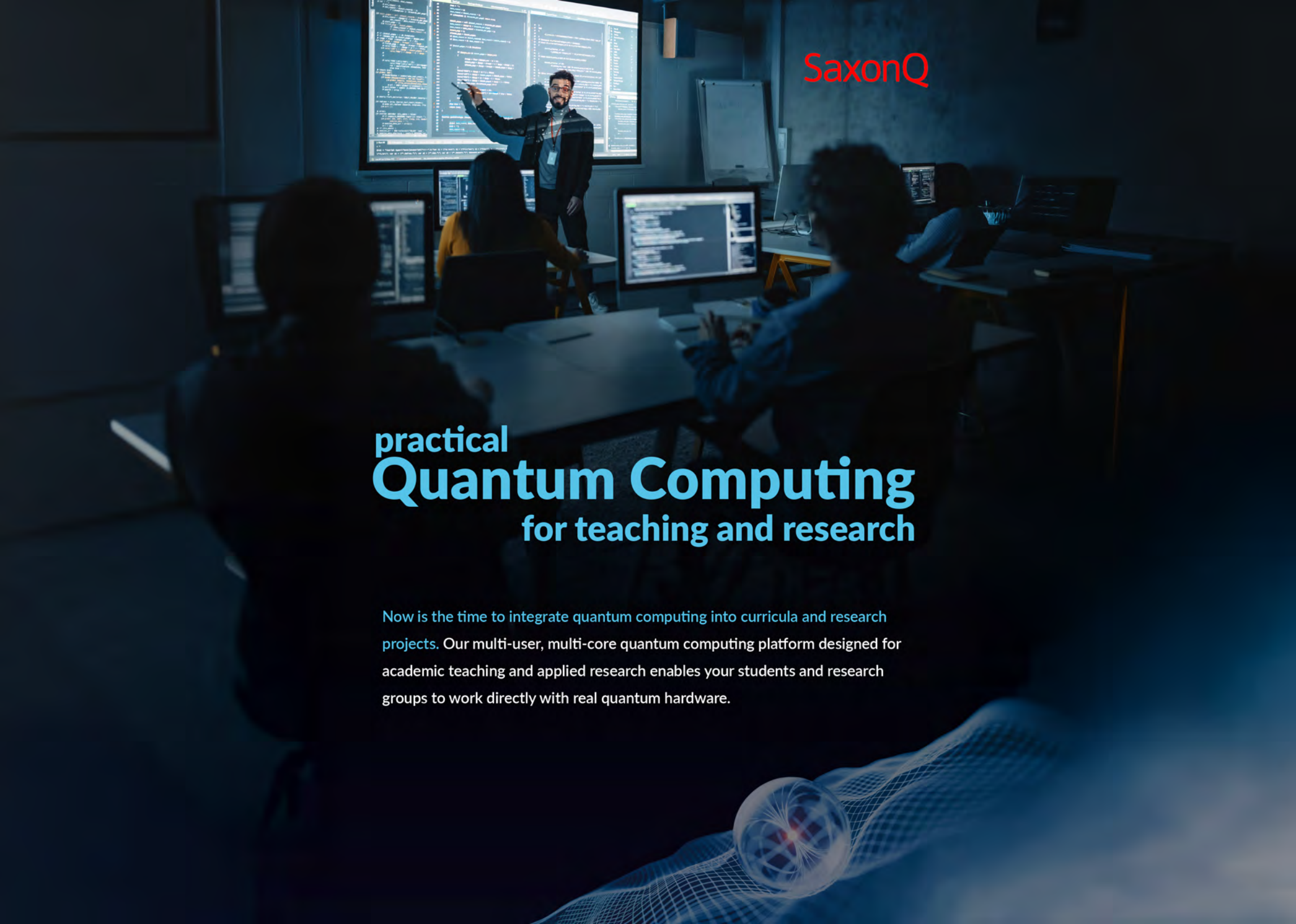


The background image shows a dimly lit classroom or computer lab. A male instructor stands in the center, pointing at a large projection screen that displays lines of code. Several students are seated at desks in the foreground, their backs to the camera, working on laptops. The room is filled with computer monitors and desks, creating a professional and academic atmosphere.

SaxonQ

practical Quantum Computing for teaching and research

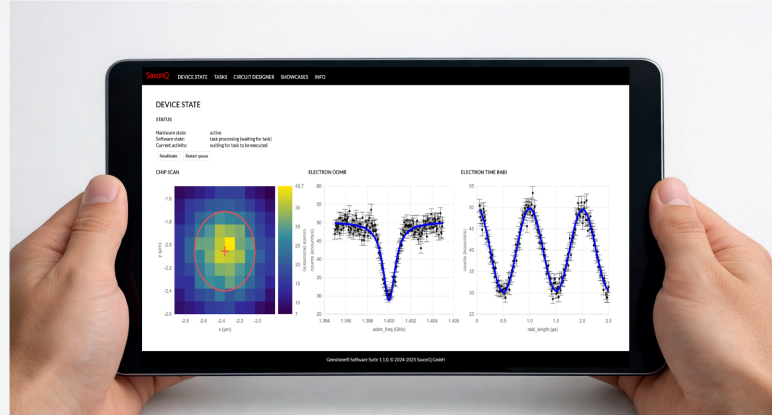
Now is the time to integrate quantum computing into curricula and research projects. Our multi-user, multi-core quantum computing platform designed for academic teaching and applied research enables your students and research groups to work directly with real quantum hardware.

A stylized, glowing blue graphic of a quantum sphere or atom, featuring a grid pattern and a central red dot, positioned in the bottom right corner of the image.

Multi-Core Mobile Quantum Computer

An ideal multi-user platform for quantum computer education and research:

- virtually unlimited number of quantum processors (1,2,8,16,32,...)
- multi-core technology
- cutting edge technology at any time with quantum chip upgrades
- on-site and remote access
- high fidelity operations



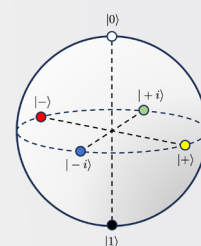
Gemstone® Software Suite

Enjoy the fully automated execution of quantum algorithms with a graphical user interface:

- code development through interface
- programming API
- showcase your experiments and projects
- extensive hardware simulation
- task queue page

Designed for group work - customized to your needs:

- each user has access to own quantum processor - suitable for larger groups
- cooperating quantum processors for distributed quantum algorithms
- customer-specific software, programming APIs
- full hardware access possible



Basic Quantum Programming

Qiskit Gates in the Clifford Group



Pauli Operators

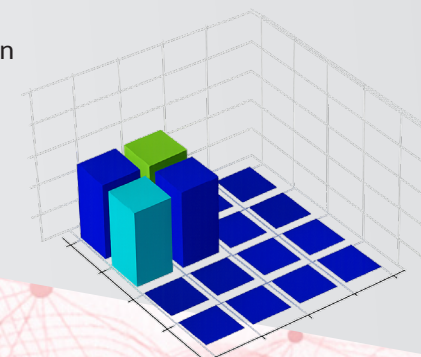
Single qubit Clifford gates

2 qubit Clifford gates

state initialization - gate operations - superposition
Bloch sphere - GHZ state
entanglement - state readout - randomized benchmarking

Advanced Quantum Programming

quantum state tomography - quantum process tomography - gate pulse design - implementation of optimal control - concatenated pulses
hybrid algorithms - quantum machine learning
quantum algorithm cutting



From Qubits to Quantum Algorithms





get entangled[®]

Contact us and find out, how you can integrate quantum computing in your teaching and research. We are happy to share our own teaching experience and find the best solution for you and your application.

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