



ICTP | International Centre for Theoretical Physics
SAIFR | South American Institute for Fundamental Research

Campus of IFT-UNESP – São Paulo, Brazil



NANA LIU
 Shanghai Jiao Tong U., China
Quantum Algorithms powered by AI



MURILO OLIVEIRA
 Kipu Quantum, Germany
Optimization Algorithms



WINFRIED HENSINGER
 University of Sussex, UK
Trapped ions



FLORIAN MEINERT
 University of Stuttgart, Germany
Rydberg atoms for quantum computing



ERNESTO GALVÃO
 UFF, Brazil
Photonic Quantum Computing



ÉLIE GOUZIE
 Alice & Bob, France
QEC with Cat Qubits



TOBIAS HAUG
 Technology Innovation Institute, UAE
Introduction to Quantum Error Correction

November 16 – 27, 2026

THIRD QUANTUM COMPUTING SCHOOL

Second-generation quantum technologies, which are characterized by being based on fundamental principles of Quantum Theory such as superposition and entanglement, have developed rapidly in recent years and are considered to be the most disruptive technologies in history, with the potential for intrinsically safe communications, sensors with precision far beyond today's devices, and, of course, the ability to process information in quantities and at speeds unimaginable for today's classical supercomputers. However, for such technologies to become truly applicable, there are numerous challenges, both experimental and conceptual, especially for quantum computing, leading many to believe that it will be several years (or decades) before universal quantum computing can truly prove advantageous in solving practical problems of industrial/commercial interest. Many of these challenges have already been addressed in the two schools we have organized so far, helping to raise awareness of the actual state of quantum computing and dispelling some of the harmful hype in the field. In addition, of course, we have contributed to the training of human resources, which will be essential for us to put Brazil and Latin America in a position to develop such technologies.

The 3rd Quantum Computing School will feature short courses and lectures on quantum technologies, with a special emphasis on quantum computing. The program will explore their potential advantages, current challenges, and practical implementation in research laboratories as well as on commercial quantum platforms.

This school will be preceded by the one-week School on Quantum Simulation in the NISQ Era from November 9-13.

Application deadline:

August 20, 2026

Online application and more information:

ictp-saifr.org/3qcs2026



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