

QUANTUM TECHNOLOGIES FOR SÃO PAULO, BRAZIL, AND LATIN AMERICA

January 30 – February 16, 2023
at Principia Institute, São Paulo, Brazil

CONFIRMED SPEAKERS

Alexia Auffeves (CNRS, France)
Alberto Paradisi (CPQD, Brazil)
Artur Ekert (University of Oxford, UK)
Bárbara Amaral (IFUSP, Brazil)
Carlos Henrique de Brito Cruz (Elsevier, UK)
Christian Schmiegelow (Universidad Buenos Aires, Argentina)
Cristiane de Moraes Smith (Utrecht University, Netherlands)
Dario Thober (Instituto Von Braun, Brazil)
Débora Milori (Embrapa Instrumentação, Brazil)
Denise Caldwell (NSF Division director)
Enrique Solano (Chief Visionary Officer of Kipu Quantum, Germany and Founder of QUANVIA, Spain)
Fernando Brandão (Caltech, USA)
Gabriela Barreto Lemos (UFRJ, Brazil)
Hugo Aguilaniu (Instituto Serrapilheira, Brazil)
José Brito (Startup quantum Concepcion, Germany)
Juan Pablo Paz (UBA, Argentina)
Kai Bongs (University of Birmingham, UK)
Liviu Nicu (CNRS-South America, Brazil)
Luiz Davidovich (UFRJ, Brazil)
Luiz Eugênio Mello (FAPESP, Brazil)
Matthias Steffen (IBM, USA)
Osvaldo Novais de Oliveira Jr (USP, Brazil)
Philippe Bouyer (CNRS, France)
Rafael Chaves (IIP-UFRN, Brazil)
Rainer Blatt (Universität Innsbruck, Austria)
Sergio Rezende (UFPE, Brazil)
Simon Gröblacher (Delft University of Technology, Netherlands)
Stephen Walborn (Universidad de Concepción, Chile)
Tatjana Wilk (MPQ, Germany)
Wolfgang Schleich (Ulm, Germany)

Quantum technologies has become a very hot topic in recent years, but it is necessary to understand what we mean by quantum technologies. It is true that quantum theory is behind a huge part of contemporary technological developments (e.g., lasers, semiconductors, and photoelectric conversion). However, the true non-classicality of quantum theory usually does not play a role in the vast majority of uses of such technologies. When we talk about quantum technologies, we are talking about things like using non-classical states of light or matter to make better sensors, or using the intrinsic randomness of quantum theory to generate keys for secure communication, and also applying quantum interference to speed up some computations. Those are the prototypical examples of the main areas of Quantum Sensing, Quantum Communication, and Quantum Computation.

The goal of this workshop is to mark the completion and launching of a Roadmap for Quantum Technologies in São Paulo, but also reaching Brazil and Latin America. We believe our state, country and region fulfill the conditions to host many active players in the production of Quantum Technologies, being much more than consumers in the Quantum Technologies global ecosystem currently under construction.

Due to the format and goals of this event, we are only encouraging the participation of members of our community (academia and industry) willing to engage and enrich our roadmap. **There is no registration fee, and the organizing committee will evaluate each application based on the aforementioned criteria. There will also be science outreach sessions during the program which will be open to the general public.**

Registration deadline:

January 15, 2023

Online registration and more information:

<https://www.ictp-saifr.org/qt2023/>

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