Quantum technologies have 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.