

Launch of the Joint Lab in Quantum Processing

ICFO and spin-off Quside Technologies team up to create a space dedicated to developing quantum processing technologies.

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ICFO and Quside announce the creation of a new Joint Lab in Quantum Processing, establishing a collaborative framework to foster the development of quantum processing technologies. Ongoing research initiatives that began before Quside spun-out of ICFO in 2017 are now beginning to produce salient results, providing the impetus for this new Tech Transfer initiative to produce novel processing technologies that aim to accelerate computational capacity, optimizing computer power and costs. The goal of the joint lab is to use advanced quantum physics concepts and models to solve new challenging problems that have been unsolvable with current existing computers and hardware.

There is a world-wide race to harness the power of quantum physics for next generation technologies. Quside, a deep tech spin-off that incubated in ICFO's Launchpad, designs and commercialize quantum components for all connected devices. By exploiting photonics

technologies and by leveraging the maturity of the semiconductor manufacturing industry, Quside develops products that offer unprecedented security and performance for cybersecurity and high-performance computing.

Director of Knowledge and Tech Transfer (KTT) at ICFO, Silvia Carrasco points out that **i¿½the continued development and incubation of ideas with QuSide has allowed us to matu e this idea and launch this new joint lab which we foresee will greatly accelerate the mark t reach of new quantum processing solutionsi¿½.**

Upon signing the agreement, Carlos Abellan, co-founder and CEO of Quside, mentions that **i¿½We are excited to partner with ICFO to accelerate the development of new quant m processing technologies that have a near-term impacti¿½.**

The Quantum Processing Lab will operate as an incubator of ideas and will launch a series of focused projects that will combine ICFO's world-leading research expertise as well as the skills and knowledge of the Advanced Computing Team at Quside. Applications will include advances in areas such as optimization problems, drug development simulation, and artificial intelligence.

Jose Martinez, Director of the Advanced Computing Team at Quside and manager of the Quantum Processing Lab states that **i¿½Building on the merger of the quantum physics a d data processing fields, this lab will enable the development and advancement of ne , quantum-based, data processing technologies.i¿½**

As Director of ICFO Prof. Lluis Torner emphasizes, **We are thrilled with the creation of the Quantum Processing Lab in partnership with Quside. The joint lab is a consequence of the visionary ideas of the KTT and Quside leaders and it will allow the exploration of truly breakthrough concepts in quantum processing, very much in line with the ICFOnian spirit.i¿**