

How far away are Quantum Technologies?

September 29, 2024

FBK researcher Federica Mantegazzini's talk at the Wired Next Fest in Rovereto

"Quantum technologies are not a distant, science-fiction future, but they already exist and are already having an important impact in a wide range of fields, from communication to medicine."

Thus **Federica Mantegazzini**, researcher and coordinator of the Superconducting Quantum Devices team at **Fondazione Bruno Kessler**, in her talk this morning at the **Wired Next Fest** in **Rovereto**.

"The field of quantum technologies," Mantegazzini went on, "is growing rapidly and is stepping through the doors of research laboratories, entering headlong into the corporate world and our society. Trento is one of the main hubs for research and innovation in this area, thanks in part to the advanced facilities present at FBK, such as the Clean Room and specialized laboratories."

During the panel discussion at Palazzo del Ben with **Francesco Tafuri**, professor of Physics of Matter at the University of Naples Federico II – who joined the event virtually – and that was moderated by **Adamà Faye**, adaptation editor of Wired, **Federica Mantegazzini** also spoke about the recent success achieved with her research group: "At Fondazione Bruno Kessler in Trento, together with my team, I deal with **superconducting quantum circuits** and we have recently realized the first **qubit** entirely built in Italy. It is a chip that represents the basic building block for building a quantum computer. Now we aim to further improve our technology and optimize the properties of the circuit, to later fully exploit the potential of FBK Clean Rooms that are suitable for large-scale micro-fabrication."

PERMALINK

https://magazine.fbk.eu/en/news/quanto-manca-al-quantum/

TAGS

- #cleanroom
- #quantistica
- #quantum
- #qubit
- #sensorsdevices
- #wired
- #wired2024

AUTHORS

• Viviana Lupi