

July 2025: the FBK projects making headlines

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From heat islands to quantum technologies, agritech, historical research and the future of young people: FBK initiatives that made headlines in July.

A journey into the clean rooms

The clean rooms and quantum technologies developed at Fondazione Bruno Kessler have recently been the subject of numerous articles and television reports. Il Sole 24 Ore's in-depth report describes the creation of the first superconducting qubit made entirely in Italy at FBK and the cutting-edge projects that combine diamonds, photons and superconductors to develop new circuits for quantum computing, highlighting the potentially revolutionary implications for the medical and technological fields. In addition, Corriere della Sera takes readers on a tour of FBK's clean rooms, the heart of its micro and nanotechnology activities, highlighting not only the quality of the infrastructure but also the value of the human capital involved in the projects. The article also emphasises how the synergy between training, applied research and innovation makes the Foundation a point of reference at European level, even for those entering the world of work in highly specialised fields. The RAI News Trento report further expands this perspective, showing how Trentino's quantum research is at the centre of a network of local and international collaborations and how the applications of qubits, photons and superconducting materials can have a concrete impact on strategic sectors such as data security, advanced diagnostics and space instrumentation.

[Rai News – Nella clean room del Quantum@TN, dove si sperimenta la fisica quantistica – 26 giugno 2025](#)

[Il Corriere della Sera – “Giovani, ricerca e lavoro: viaggio dentro le Clean Room di FBK” – 1 luglio 2025](#)

[Il Sole 24 Ore – Nova – “Nell’officina delle tecnologie quantistiche tra diamanti, fotoni e superconduttori” – 13 luglio 2025](#)

Mapping heat islands and pollution

As a guest on **Radio Italia Anni '60's** 'Un buon futuro' programme, **Raniero Beber** discusses how artificial intelligence can become a key tool for addressing environmental challenges in cities. He talks about its application for mapping heat islands and pollution, the focus of an innovative project by FBK carried out by the 3DOM research unit in collaboration with the MTSD unit. Through the integration of satellite data, mobile sensors and intelligent algorithms, the project allows for the accurate monitoring of urban heating and air quality, generating detailed maps of heat islands and pollution levels. These tools make it possible to identify the most vulnerable urban areas, offering concrete support to administrations in planning targeted interventions against the effects of climate change. The project is constantly evolving and aims to further improve data resolution and the depth of environmental analysis, for the benefit of increasingly sustainable urban development.

[Radio Italia anni '60 – Un buon futuro – 21 luglio 2025](#)

Agriculture 4.0: growth and digital challenges

The magazine **Terra Trentina** features an in-depth article on **agriculture 4.0** in Italy, which aims to make agricultural production more efficient and sustainable thanks to advanced technologies. The market is growing (2.5 billion in 2023), but adoption remains limited to 12% of cultivated land. Among the main challenges are business fragmentation, poor system interoperability, lack of digital skills among farmers, and uneven access to Internet connections in rural areas. To address these challenges and promote cutting-edge solutions in the field of digital agriculture, Fondazione Bruno Kessler dedicated its annual 2025 research presentation event to the theme of "Human-centred agritech", sharing its vision and cross-cutting skills: from computer vision to autonomous robotics, from automation to remote sensing, to data management and analysis. The in-depth analysis also includes an overview of other events and projects promoted by FBK that address issues related to agritech.

[Terra Trentina – "Agricoltura 4.0: crescita e sfide digitali" – pag 35-36, giugno 2025](#)

Are we too strict with young people?

Ferruccio de Bortoli, in an editorial in the **Corriere della Sera** newspaper, echoes the **thoughts of our president Ferruccio Resta**, who invites us to rethink the dominant narrative about the younger generations, often described as disinterested, passive and perpetually distracted.

De Bortoli argues that this view is outdated and misleading. On the contrary, many young people show curiosity, commitment and a desire to contribute actively to society, tackling complex challenges with practicality and initiative. The problem, according to Resta and shared by de Bortoli, is that adults, including parents, teachers and institutions, often end up stifling young

people's potential instead of nurturing it. We therefore need a new narrative, one that recognises and supports the leading role of the younger generations. Only by changing our perspective and attitude can we create the conditions for young people to feel that they are truly an active part of the country's future.

[Corriere della Sera – “Troppo severi ed esigenti con i giovani, un'autocritica” – 10 luglio 2025](#)

A forgotten historical link

For a long time, it was believed that the inhabitants of the Italian peninsula played a marginal role in the history of Atlantic slavery. However, recent studies are challenging this belief. **Federica Morelli**, a researcher at the Bruno Kessler Foundation's Italian-German Historical Institute, talks in an interview published in **II T** about the BlackItaly project, which aims to bring to light the deep and hitherto little-studied links between Italy and the Atlantic slave system that developed between the late 15th and 19th centuries. Through in-depth archival research, the project reconstructs the direct and indirect participation of Italian merchants and bankers in that global system. “The work we are doing also aims to show how the racial categories that were created in the modern era actually have more ancient roots,” says Morelli.

Il T – “Tratta di schiavi alle radici del razzismo Anche in Italia” – 29 giugno 2025

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<https://magazine.fbk.eu/en/news/july-2025-the-fbk-projects-making-headlines/>

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