

## CALL FOR PAPERS

### IMPORTANT DATES

**April 15, 2024**

Abstract Submission Deadline  
to EDAS

**April 29, 2024**

Acceptance Notification

**June 3-6, 2024**

Workshop, Cagliari, Sardinia,  
Italy

**September 1, 2024**

IEEE TAS/TQE Special Issue  
Paper Submission Deadline

THE 16<sup>TH</sup> IEEE WORKSHOP ON LOW-TEMPERATURE ELECTRONICS IS BEING PLANNED FOR JUNE 3-6, 2024 TO BE LOCATED IN CAGLIARI, SARDINIA, ITALY.

The recent progress in cryogenics technologies, along with the increasing interest in space-based communication, gives a new light to low temperature electronics. The increasing interest in quantum technologies and nanodevices, most of which need low temperatures, are envisaged as the traditional area of interest of the WOLTE community.

This workshop series has a consistent policy of holding no parallel sessions. Therefore, its program is comprised of single technical sessions. This gives a unique opportunity to stimulate discussions among all the participants traditionally coming from a variety of semiconductor and superconductor-related research fields.

Following its tradition of receptiveness to the emerging research field, the 16<sup>th</sup> edition of WOLTE, along with the traditional semiconducting and superconducting low temperature electronics, will include new topics on quantum technologies.

Industrial and technological applications will receive particular attention in a dedicated and attractive exhibition area.

### TOPICS

- » Low-temperature electronic and memory circuits, components, and devices
- » Low-temperature quantum sensors
- » Novel low-temperature devices including superconducting diodes, nanobridges, cryotrons, spintronic, voltage-controlled devices, charge density wave devices, etc.
- » Advances in modeling of low-temperature devices and circuits
- » Advances in low-temperature circuit technologies including neuromorphic and ballistic circuits
- » Low-temperature electronics for qubit and sensor control and readout
- » Low-temperature electronics for low latency quantum error correction
- » Low-temperature electronics for space and high-energy physics applications
- » Hybrid technology integrating different types of low-temperature electronics in a single system
- » Integration of low-temperature electronics with photonic, spin-based quantum systems
- » Advances in cryocooling systems for electronics
- » Advances in cryopackaging including cryosystems for quantum computers at scale, dark matter search systems
- » Advances in flux trapping management, modeling, and shielding techniques

Submit an abstract of up to one page to the EDAS conference paper submission site. Additional details can be found at [wolte16.org](http://wolte16.org).

In addition to a planned proceeding consisting of Abstracts, presenters at WOLTE16 will have the opportunity to submit an expanded paper to either IEEE's TAS or the TQE journals.