

## The ETICo2 Laboratories, a state-of-the-art facility for opto-electronics and coatings for ET

The ET Infrastructure for Optics and Electronics in Cagliari (ETICo2) is a part of the ETIC project aiming at establishing a set of state-of-the-art laboratories dedicated to optoelectronics and coatings for ET. The facility has been recently established at the Department of Physics of the University of Cagliari as result of a collaboration between INFN and Cagliari University.

The new R&D facilities include a state-of-the-art clean room equipped with advanced systems for testing and assembling optoelectronic devices. They also feature a cutting-edge thin-film fabrication laboratory with a thermal evaporator and e-beam deposition technology for mirror coatings. In addition to a state-of-art setup for thermal and magnetic properties characterizations, a newly developed optical diagnostic laboratory and a thermo-magneto-optic laboratory, along with a high-performance computational facility, are currently being outfitted to further enhance research activities.

This infrastructure will support the development of enabling technologies of the ET interferometers such as advanced photonic and electronic devices for monitoring the next-generation gravitational wave detector and the manufacturing and testing of dielectric materials and multi-layer coatings for the mirrors of the Einstein Telescope.

A comprehensive overview of the ETICo2 laboratories will be presented at the symposium, highlighting their current status and their future role for the Einstein Telescope in Sardinia.

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