



INTERNATIONAL COLLABORATIONS

INFN LEADER OF THE ET AND EUPRAXIA PROJECTS, PRESENTED AT ESFRI

ET Einstein Telescope and EuPRAXIA: two major European research infrastructures, which promise to be competitive at the global level, in gravitational wave research and the development of plasma particle accelerators, respectively. These are the international projects led by INFN, and which the Ministry of Education, Universities and Research has nominated for the forthcoming 2021 Roadmap of ESFRI (European Strategy Forum on Research Infrastructure), the strategic forum that identifies the major research infrastructures for future investment at the European level. Italy, with Sardinia, is one of the two candidate sites to host ET, and is participating with INFN, INAF and INGV, and the Universities of Sassari and Cagliari. For EuPRAXIA, in which our country is participating with INFN, CNR, the Universities of Rome Sapienza and Tor Vergata, ENEA and Elettra Sincrotrone Trieste, it has already been decided by the international scientific community that the headquarters will be at the INFN Frascati National Laboratories.

ET Einstein Telescope is a project for the construction of a gravitational wave terrestrial observatory: an underground interferometer of triangular shape with 10 km long arms, which will use highly advanced technologies compared to those currently available. The main objective of the EuPRAXIA project, on the other hand, is the construction of a new generation of plasma particle accelerators, able to obtain higher energies than those reached by current accelerators with reduced cost and size. ■