

The Transient High-Energy Sky and Early Universe Surveyor (THESEUS) is a space mission concept currently under Phase A study by ESA as candidate M5 mission, in view of a launch opportunity in 2032. The current assessment phase will be concluded in 2021, with most of the core activities planned for 2019-2020. Proposed and developed by a large international collaboration, the THESEUS project aims at fully exploiting long Gamma-Ray Bursts for investigating the early Universe and at providing a substantial advancement of multi-messenger and time-domain astrophysics. Through an unprecedented combination of X-/gamma-rays monitors, an on-board IR telescope and automated fast slewing capabilities, THESEUS will be a wonderful machine for the detection, characterization and redshift measurement of any kind of GRBs and many classes of X-ray transients. In addition to the full exploitation of high-redshift GRBs for cosmology (pop-III stars, cosmic re-ionization, SFR and metallicity evolution up to the "cosmic dawn"), THESEUS will allow the identification and study of the electromagnetic counterparts to sources of gravitational waves which will be routinely detected in the late '20s / early '30s by next generation facilities like aLIGO/aVirgo, LISA, KAGRA, and Einstein Telescope (ET), as well as of neutrino sources, detected, e.g., by KM3NeT, and most classes of transient sources, thus providing an ideal synergy with the large e.m. facilities of the near future like LSST, ELT, TMT, SKA, CTA, ATHENA.

In this talk, we will provide an overview of the mission status and development.