

SCOPE

The scope of expert panel W&T8 encompasses fundamental research in the fields of Earth and space sciences.

Earth sciences cover the disciplines of geology, hydro(geo)logy, geophysics, atmospheric sciences, oceanography, paleontology, climatology, global environmental change, natural resources management, physical geography, geoarchaeology and the sustainability of Earth's resources.

Space sciences includes observational and theoretical research on cosmology, the formation and evolution of galaxies, galaxy clusters and the Milky Way, the formation and evolution of stars and stellar clusters, exoplanetary and planetary science, and meteorites, as well as solar, heliospheric and interplanetary physics. It also includes the development of instrumentation and other tools for these areas of research.

More specifically, the following areas are included:

TOPICS

– EARTH SCIENCES

- » Petrology, mineralogy
- » Geochemistry
- » Sedimentology, soil science, stratigraphy
- » Oceanography, marine geology
- » Hydrology, hydrogeology, environmental geology, water resource management, hydraulic engineering
- » Applied geology, economic geology
- » Physical geography, geomorphology, hydrography
- » Geophysics, geodynamics, geomagnetism, paleomagnetism, applied geophysics
- » Paleontology, Geo(micro)biology
- » Structural geology, tectonics
- » Atmospheric sciences, meteorology
- » Climatology, climate change, climate modelling, paleoenvironment, paleoclimatology
- » Archaeometry, geoarchaeology
- » Cartography, geoinformation science

- » Sustainability of Earth's resources (water, soil and minerals)

– SPACE SCIENCES

- » Stellar astrophysics (interiors, atmospheres, winds, clusters, formation and binarity)
- » Solar system science (planetary sciences, meteoritics)
- » Solar physics (Sun, heliosphere)
- » Galaxies (formation, evolution, and clusters of)
- » Cosmology
- » Galactic astronomy (Milky Way and its contents)
- » Exoplanets (detection, formation and evolution)
- » Astronomical instrumentation
- » Astrochemistry/astrobiology
- » Multimessenger astrophysics (observational gravitational, high-energy, and particle astrophysics)
- » Time-domain astrophysics