Electric Space Propulsion Test Facility Göttingen (STG-ET)

**Measured values**
- Thrust
- Thrust vector
- Ion beam distribution
- Ion energy
- Temperature distribution

**Description of facility**
The STG-ET facility was designed for electric space propulsion investigations, especially long term testing. The main component of the facility is a large vacuum chamber of 12 meters length and 5 meters diameter. Besides performing measurements of thrust or beam profiles on the thrusters the facility is meant to investigate the interaction of thruster plume with spacecraft components. The following diagnostic equipment is available:

- Thrust balance for thrusters with up to 40kg mass
- Several beam scanners for profiles at different distances from thruster exit
- Retarding potential analyzer
- Infrared cameras
- Video camera
- Mass spectrometer (RGA)
- Data acquisition system

Located at DLR Göttingen

**Application**
- Testing of space electric propulsion devices
- Investigation of interactions of thruster plume with spacecrafts and their component
- Development of ion beam and plasma diagnostics
- Large facility for simulation of space environment

**Literature / References**
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This handout, and cross-references to related measurement techniques and facilities are available at: http://messtec.dlr.de/link-198-en.