The GDT device is an experimental facility for studies on the main issues of development of nuclear fusion systems based on axisymmetric mirror traps.

**Key parameters of the GDT device and confined plasma:**

- **Total power of NB:** 5 MW
- **ECRH power:** 0.7 MW
- **Energy of neutrals:** 25 keV
- **Fast ion energy:** $<E> \approx 10$ keV
- **Maximum $\beta$:** up to 0.6
- **Electron temperature:** up to 0.9 keV

Stable high energy density plasma can be confined with simple circular magnets:


Micro-instabilities can be tamed:


Electron temperatures reaching a keV have been measured:


These three accomplishments provide a basis to reconsider the mirror concept as a neutron source for materials development, nuclear fuel production, and fusion energy production.