

Stability and Confinement Studies in the Gas Dynamic Trap

Summary:

- MHD instability rising in high temperature regime was suppressed by extra negative biasing of the endplates near-axis parts.
- Experimentally verified, that heat fluxes from the mirror are still described by a simple theoretical model in all the available values of electron temperature.
- Gas density up to 10^{14} cm^{-3} in expander cells does not affect the plasma parameters of the GDT central cell.
- Magnetic field oscillations at frequencies of several tens of MHz are preliminary identified as DCLC mode rising in turning points of fast ions.