

Study of propagation of ion acoustic soliton in multi-cusp plasma device

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Multi-line cusp geometry has been used to confine the Argon plasma in Multi-cusp Plasma Device (MPD). This geometry has the centre of radius of curvature outside the confined plasma, that gives magneto-hydrodynamic stability and the plasma produced is very quiescent. In MPD six electromagnets on the circumference of the device, have been used for the magnetic field profile production. The experimental study of the ion acoustic soliton interaction with plasma in MPD will be presented in this paper.