

FORMATION OF A CHARGED
LAYER IN A BOUNDED NON-UNIFORM
MAGNETIZED PLASMA IN RF FIELD

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S u m m a r y

A model of plasma dynamics in the box of an ICRF (ion cyclotron radio-frequency) antenna without Faraday shield used for the plasma heating in tokamaks is proposed. Formation of a macroscopic layer of oscillating charge that plays a role of a shield is predicted. Relation to phenomena observed in a scrape-off layer plasma is discussed.