

PROPAGATION AND ABSORPTION OF WAVES IN THE LOWER HYBRID
FREQUENCY RANGE IN SMALL ASPECT-RATIO TOKAMAK PLASMA

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The propagation and absorption of waves, with $f_{ce} > f > f_{LH}$, in small aspect-ratio tokamak plasmas is investigated. A ray-tracing program is used to calculate the ray paths and the absorption along the ray, due to Landau damping. A model magnetic field appropriate for this equilibrium configuration is employed, together with the associated density and temperature profiles, given as functionals of the poloidal flux ψ . The results will serve as a basis for future work on the conceptual design of noninductive current generation in the Advanced Toroidal Experiment of the National Plasma Laboratory.