

Abstract Submitted  
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**Integration of Fokker Planck calculation in full wave FEM simulation of LH waves**<sup>1</sup> ORSO MENEGHINI, SYUN'ICHI SHIRAIWA, RON PARKER, MIT-PSFC — A full wave simulation code based on Finite Element Method (FEM) was developed to solve LH waves in tokamaks [1]. The FEM approach allows a seamless handling of the antenna, first wall, SOL, divertor and core regions. In the region of plasma inside of the separatrix, electron landau damping is modeled by means of an iterative procedure. The code has been recently coupled to a bounce averaged Fokker Planck (FP) solver, which self consistently calculates the electron 2D distribution function resulting from the balance between collisions and RF quasilinear diffusion (DQL) in a toroidal geometry. The evaluation of the DQL term from the full wave fields has been done by integration of the momentum equation of test particles. Results comparing Maxwellian, 1D FP and 2D FP plasmas will be presented for the Alcator C-Mod tokamak.

[1] S. Shiraiwa, this conference.

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