**Full-wave ICRF simulations with non-Maxwellian particle distributions***

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RF induced departure of particle distribution functions from local Maxwellians affects, in general, the amount of single pass absorption, the absorption profile and the distribution of absorbed energy amongst species. We examine these effects for a number of model distributions and heating scenarios in the ion cyclotron range of frequencies (ICRF) using the TORIC full-wave finite Larmor radius field solver. We also report on progress toward fully self-consistent simulations to be obtained by iterating between TORIC field solutions and CQL3D Fokker Planck solutions for the bounce-averaged distribution. Self-consistency is achieved in these simulations by re-evaluating the plasma conductivity using the non-thermal particle distribution from the most recent calculation by the Fokker Planck solver. Likewise, the ICRF wave fields from the most recent field solve are used to evaluate the RF diffusion coefficient that is used to advance the non-Maxwellian particle distribution. This effort complements previous research with the AORSA+CQL3D package[1], but is specialized to the FLR regime.

[1] E. F. Jaeger, *etal*, Phys. Plasmas, **13,** 056101 (2006).
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