

Possible Slow Wave excitation during HHFW Experiments on NSTX

C.K. Phillips PPPL

N. Bertelli, E. Valeo PPPL

P.T. Bonoli and J.C. Wright PSFC-MIT

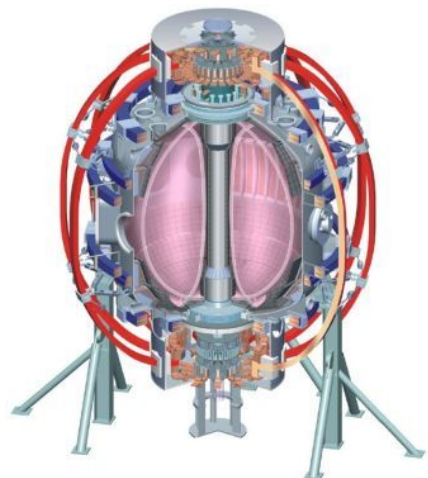
L.A. Berry, D. Green ORNL

E.F. Jaeger XCEL Engineering

RF SciDAC and NSTX Teams

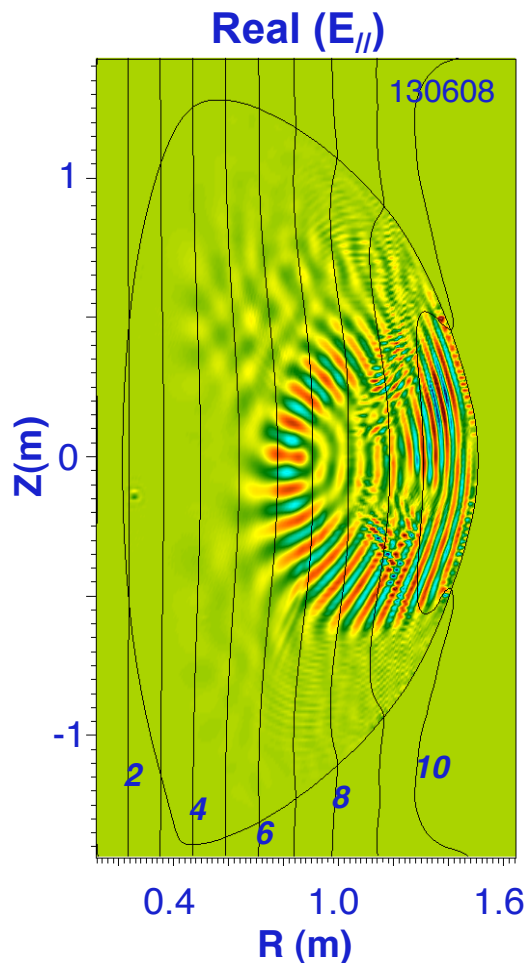
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High resolution AORSA and TORIC simulations show new slow wave excited in NSTX HHFW experiments



AORSA 256 X 256 elements

- Requires B_p upshift of $k_{//}$, finite T_e but is independent of T_i (not an IBW)
- Related to warm electrostatic ICW first seen by Motley and D'Angelo in a Q-machine (1961)
- Also found in high resolution simulations of C-Mod ICRF discharges
- May provide another path for power absorption in ST's and tokamaks from launched waves or from EP modes
- Analysis needed to determine relative strength of power absorption and to address some convergence issues
- Detection possibilities include high frequency upgrades to high-k scattering, an ECIC system or a PCI system;