

## XP – Investigate core energy transport via HHFW

- Core ( $\rho < \sim 0.4$ ) energy transport anomalous in NBI plasmas
- Two mechanisms proposed, both involving CAEs/GAEs:
  - enhanced  $\chi_e$  from stochastization of resonant  $e^-$  orbits
  - energy channeling from beam ions to edge kAWs
- Experiment: Characterize energy transport in aftermath of core HHFW heating of NBI plasma
  - Expect rapid  $T_e$  relaxation for orbit stochastization but not for coupling to KAWs
  - Monitor core turbulence: important to not excite  $\nabla T_e$  turbulence
  - Monitor fast-ions: need to understand heating source post-HHFW
  - 1/2 day
  - Scan BT & n ( $V_{Alfvén}$ ), beam sources if time permits