

Wave-Particle Interaction Experiments in Reversed Field Plasmas Need 2-3 Run Days

High Priority:

- XP-949: "Search for EP-Induced GAM (EGAM)" (Fu) needs counter-injection campaign for ~ 1 day

Lower Priority:

- XP-944: "HHFW Heating and Edge Effects in L-mode Plasmas" & XP-946: "HHFW Heating and Edge Effects in H-mode Plasmas" (Ryan & Hosea) would benefit from reversed I_p and/or reversed B_t
 - *Can run in piggyback by adding ~100 ms RF pulse at end of other XP plasmas*
 - *Would study ELMs, blobs, divertor erosion effects etc.*
- Reversal of I_p significantly changes beam ion orbit shapes & loss fraction
 - *Benchmark fast-ion loss models.*
 - *Observe mode activity in reversed I_p plasmas mostly in piggyback*
 - *Reversing B_t only has no effect on energetic particle physics*
- NPA studies (Medley) benefit from a NB source scan in MHD quiescent Deuterium L-mode to map fast-ion phase space accessible to NPA

Even Lower Priority:

XP-917: "FIDA Blue/Red Shift" (Heidbrink & Podesta) would also benefit from a few hours of run time with I_p and/or B_t reversed