## D. Smith (UW-Madison)

- XP1: Measure RF wavefield density profile with turbulence diagnostics
  - Impose ~10 kHz beat frequency
  - 2 possible methods
    - 10 kHz beat frequency with 2 RF frequencies
    - 10 kHz amplitude modulation
  - Validate wavefields from RF simulations
  - Developed following discussions with R. Fonck and J. Hosea
- XP2: Investigate TAE stability through fast ion redistribution by GAE avalanches
  - Fast-ion redistribution by GAE avalanche can apparently push TAE across stability boundary → challenge MHD codes
  - Utilize BES to obtain radial profiles and time evolution of modes and fast-ion-induced beam emission
  - Utilize correct BES timing to correlate with magnetics
  - Developed following discussion with E. Fredrickson