



- off-axis neutral beam heating with core W accumulation allows us to operate in unique parameter space concerning $\beta_{EP}/\beta_{th} \sim 1$ and $E_{EP}/E_{th} \sim 100$
- unprecedented number of EP driven modes with large saturation amplitudes are observed
- opens path to study previously not accessible non-linear coupling processes and energetic particle (EP) avalanche physics
- understanding is an prerequisite for the simulation of burning plasmas; various modeling efforts have been started