

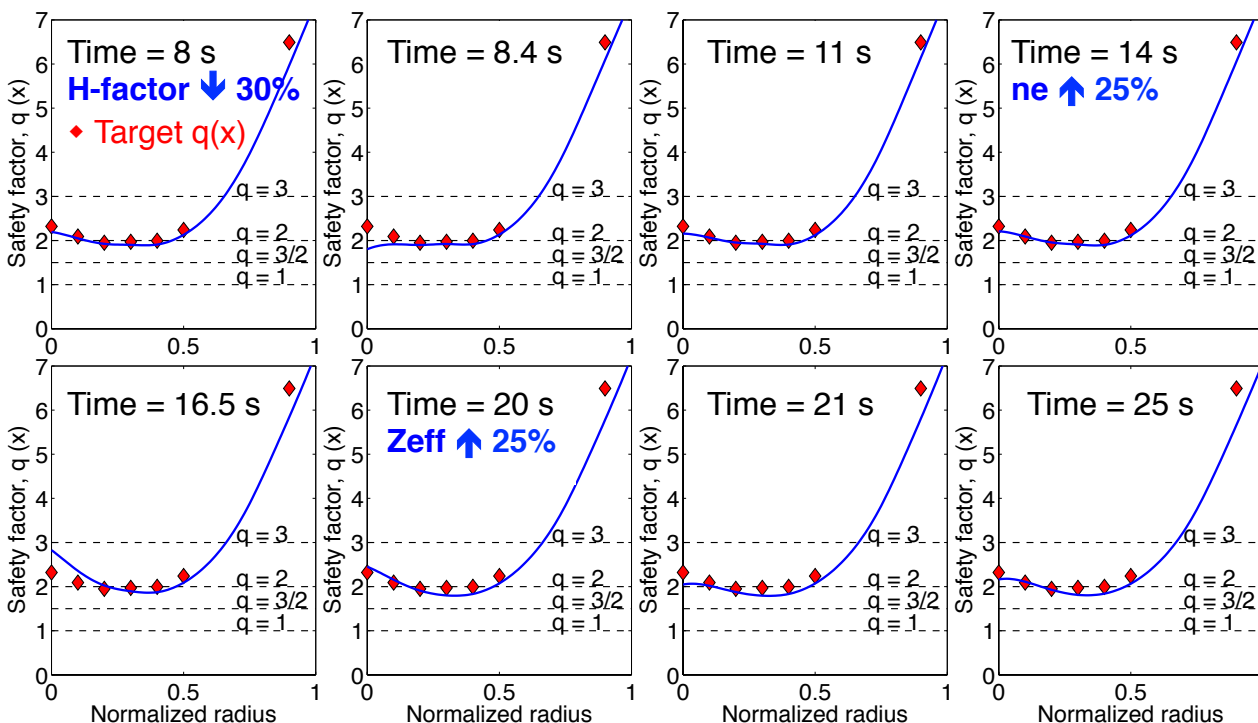
Combined Magnetic and Kinetic Control of Advanced Tokamak Steady State Scenarios

(PPC/P5-42)

NEW:

A. Good linear control-oriented models can be identified from fast non-linear METIS simulations based on DIII-D AT discharges

B. Robust q-profile and β_N control demonstrated on closed-loop simulations using i) On-axis NBI, ii) Off-axis NBI, iii) Off-axis ECCD, iv) Loop voltage = 0



Applied Disturbances

- @ t=8 s: H-factor \downarrow 30%
- @ t=14 s: $n_e \uparrow$ 25%
- @ t=20 s: $Z_{\text{eff}} \uparrow$ 25%

