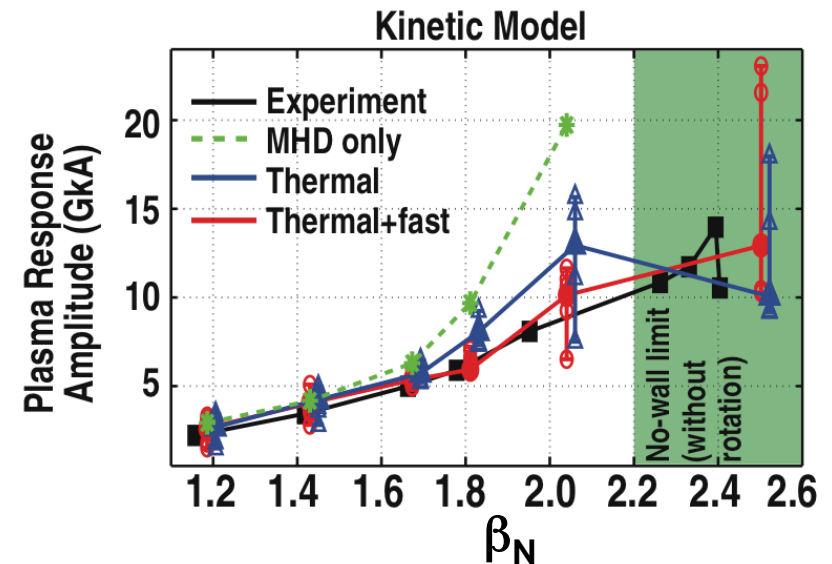


# Modelling of Rotation and Fast-ion Effects on RWM Stability in DIII-D Plasmas

EX/P2-20

- RWM stability model MARS-K validated against DIII-D experiments, for

1. Thermal and fast-ion damping
2. Plasma rotation
3. Hard  $q=2$  current limit



1. Fast NBI-generated ions provide 45% of the damping just below the ideal no-wall limit
2. The rotation effects above the no-wall limit are not well reproduced  $\rightarrow$  more work in progress
3. MARS-K reproduces the new low- $q$  regime very well