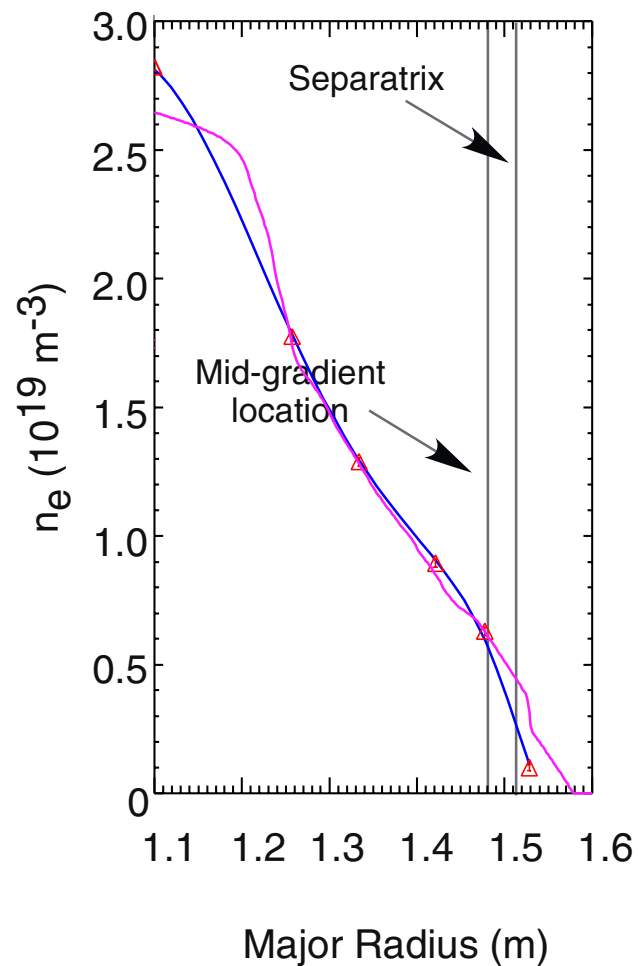
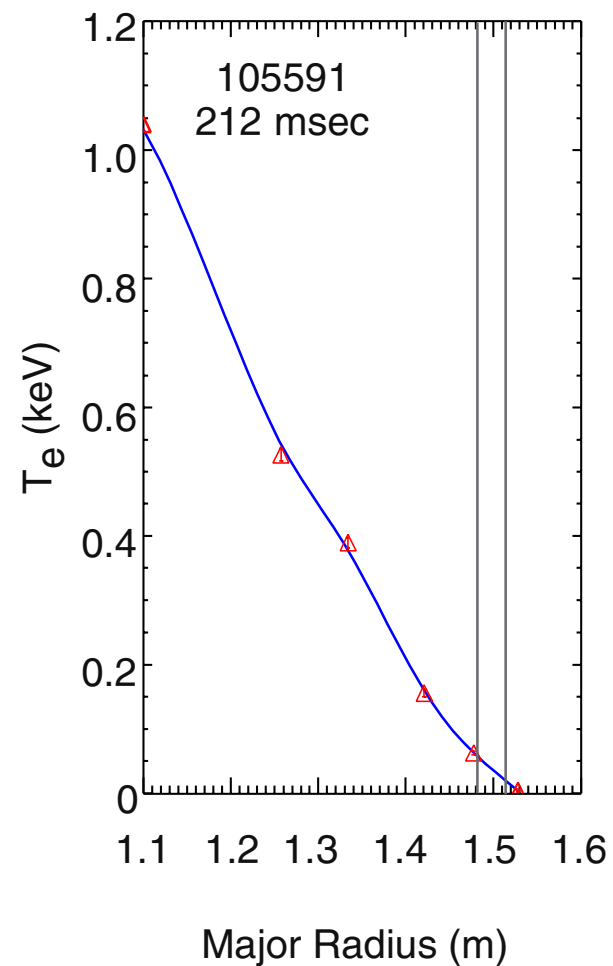


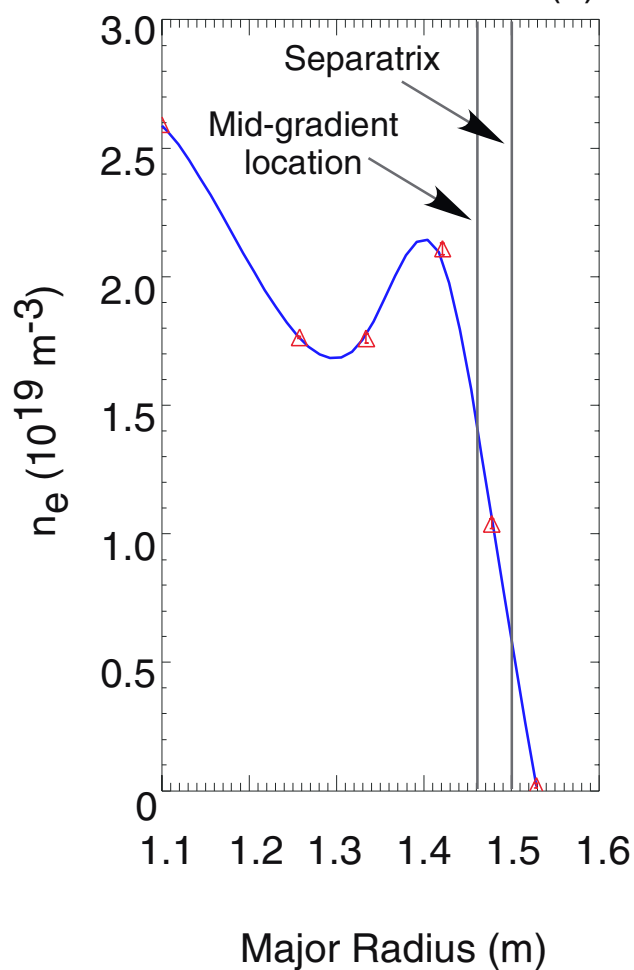
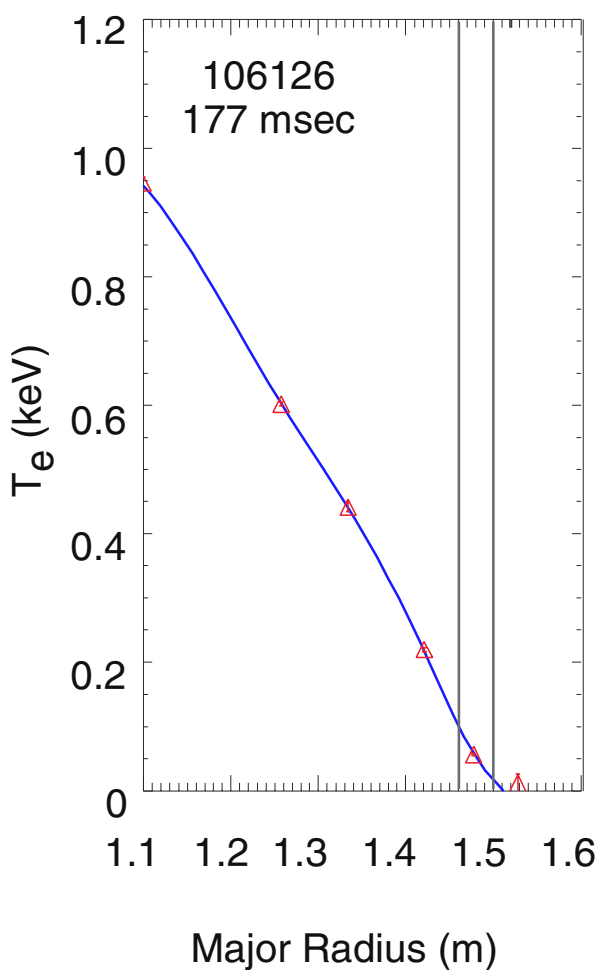
Edge Gradient Stability – S. Kaye

- Examine edge gradients in L, H, L-H plasmas with respect to various “transition” theories
 - Drift-resistive ballooning (Rogers and Drake, Guzdar et al.)
 - Peeling modes (Wilson et al.)
 - Drift-Alfven instability (Pogutse et al.)
- Determine separation of groups of points (L vs H vs L-H) among different theories
 - Predictive capability?

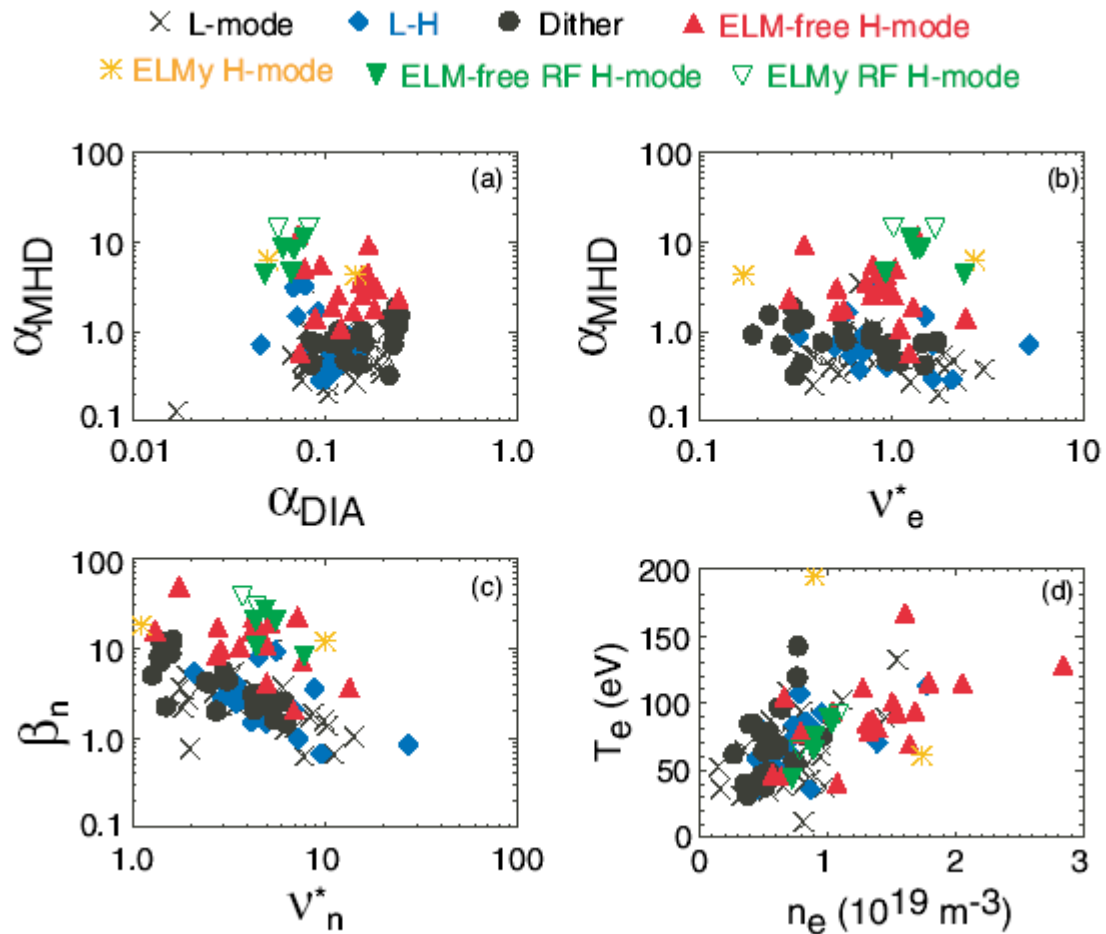
(a)



(b)



Various transition theories show no predictive capability



Requirements for comprehensive treatment

- Greater spatial coverage
 - T_e , n_e through gradient region (MPTS, probes?)
- T_i , v_ϕ with good spatial, temporal resolution
 - Changes in rotational shear
 - Determination of total pressure gradient
- Greater temporal resolution
 - GPI indicates transitions occur on 20 μsec timescales