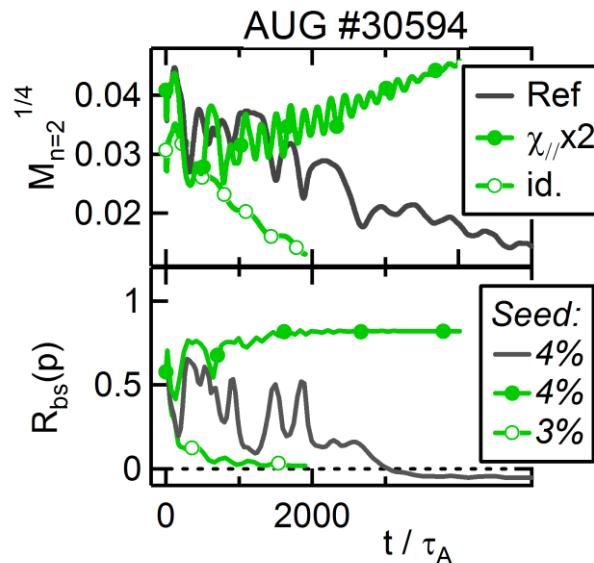


Drift-neoclassical model and insights on NTM drive

- Self-consistent fluid drift-neoclassical model implemented in the nonlinear MHD code XTOR
- Bootstrap and pressure perturbations not fully correlated [measure: $R_{bs}(p)$]
- Triggering of a (3,2) NTM obtained by increasing this correlation



~island width

Correlation bootstrap & pressure

Strategies for island control

- RF current source & controller implemented in XTOR
- Radial sweeping mitigates misalignment risk for preemption and stabilization (TCV&AUG exp.)
- Modulation lowers final size for a broad RF current source
- Alternate modulation allowing nearly continuous O-point hitting (FADIS) reduces stabilization time

