

3D equilibrium due to RMPs leads to toroidally asymmetric density gradients and turbulence stability in pedestal in DIII-D

- **Helically localized flux tubes with larger normalized gradients observe larger fluctuation amplitudes**
 - Could drive toroidally asymmetric heat and particle fluxes to divertor
- **Modeling shows pedestal density can vary within flux surface**
 - 2-fluid effects, large diamagnetic term necessary to establish intra-surface pressure gradients

Pedestal turbulence varies toroidally with RMP fields applied

