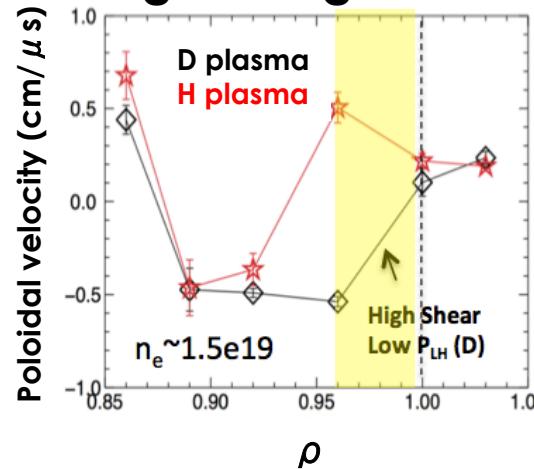


Isotopic and Density Dependencies of L-H Power Threshold Partially Explained by Multimode Edge Turbulence Interactions and Shear Flow

- Edge turbulence characteristics differ in H vs. D plasmas
 - Higher fluctuations measured in D
 - Provides enhanced Reynolds stress drive to drive shear flow and trigger L-H transition
 - Higher decorrelation rate in H
 - Requires higher shear to suppress turbulence
 - Low L-H power threshold associate with Dual counter propagating modes
 - Mode interaction may favor shear flow generation

D plasmas have higher edge shear



$S(k, f)$ for low- k Edge turbulence

