CONTINUUMGYROKINETIC SIMULATIONS OF NSTX SOL TURBULENCE WITH SHEATH-LIMITED MODEL GEOMETRIES

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- Gkeyll is a continuum gyrokinetic code for plasma turbulence in tokamak edge region, including SOL
- Uses a high-order energy conserving discontinuous Galerkin algorithm
- Sheath boundary conditions allow currents to wall
- Applied to NSTX SOL turbulence, Texas Helimak and straight field LAPD machine (also w/ GENE group)

Heat-flux to divertor plate profile. Width narrows at highest poloidal field.

Density fluctuations near midplane in NSTX SOL