Spatial structure of turbulence:
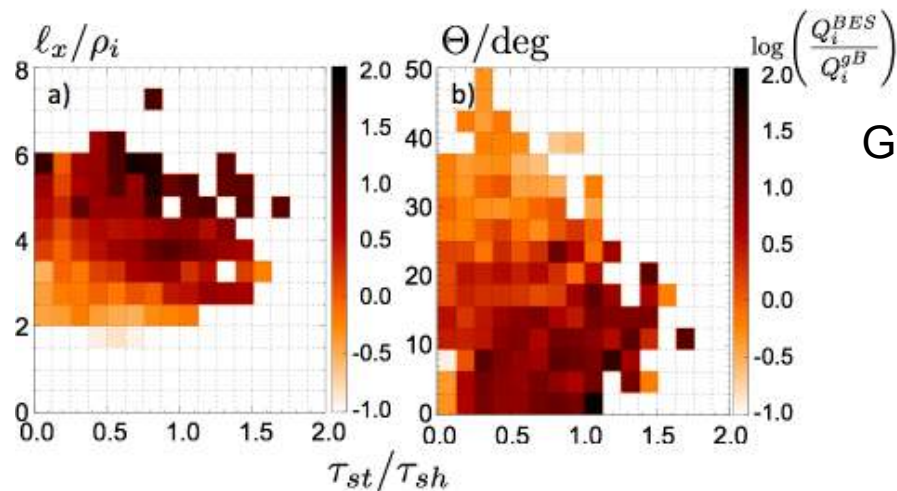
- BES used to measure 2D radial-poloidal structure of the ion-scale turbulence

- Database of correlation lengths, $\ell_{x,y}$, wavenumbers $k_{x,y}$, eddy tilt $\Theta = k_x/k_y$ and equilibrium parameters used to determine their scaling, e.g. with flow shear

Gyro-Bohm normalised heat flux $Q_{i,BES}/Q_{gB}$:

- Increases with radial correlation length ℓ_x
- Decreases with eddy tilt $\Theta = k_x/k_y$
- Weak correlation with normalised flow shear τ_{st}/τ_{sh}

Zonal flow detection:

- Fluctuating velocities determined from BES ($\tilde{U}_z$) and DBS ($\tilde{U}_\perp$) data

- Coherence analysis reveals significant power at $f < 2$ kHz and spatial coherence

- Consistent with presence of ion-scale zonal flows with $k_x\rho_i \sim \mathcal{O}(0.1\text{-}1)$