

Summary

- **New and unique measurements shed light on inter-ELM thermal transport by drift wave like turbulence**
- **Evolution of ITG-scale turbulence regulated by ExB shear consistent with Q_i decreasing from being anomalous to closer to neoclassical**
- **TEM-scale \tilde{n} increases at critical ∇T_e and can be responsible for anomalous Q_e inferred from experiments**
- **ITG and TEM-scale \tilde{n} evolutions are consistent with theoretical predictions of these being ITG and TEM instabilities respectively**