Exploring the Regime of Validity of Global Gyrokinetic Simulations with Spherical Tokamak Plasmas, Y. Ren et al. (EX/P4-35)

- Gradient-driven GTS simulations predict similar electron energy flux before and after RF cessation in a set of RF-heated L-mode plasmas
  - Consistent with the small equilibrium profile changes before and after RF cessation
  - Inconsistent with the observed factor of 2 decrease in electron heat flux after RF cessation from power balance analysis

- However, gradient-driven GTS simulations demonstrate decent agreement in ion thermal transport with a set of NBI-heated NSTX H-mode plasmas
  - Experimental ion heat flux can be explained with predicted ion energy flux plus neoclassical ion heat flux

- More GTS simulations are needed to understand the above discrepancy and to quantify the regime of validity of the GTS code