Constraining HODs models using HSC Weak Lensing
Joel C. Zinn, Princeton University

- $\langle N(M) \rangle \rightarrow P(k) \rightarrow \gamma(r), \omega(\theta), \xi_{QQ}(r)$
- Richardson vs. Kayo-Oguri average shear $\langle \gamma(r) \rangle$
- WISE$_{QQ}$ (magnification), HSC$_{QG}$ (shear)
  - Measure $\omega(\theta)$ in different magnitude bins, $\omega(\theta) \propto (2.5\alpha - 1)$
  - Better shape measurements with HSC + higher redshift galaxies $\rightarrow \gamma(r)$

Expected Shear Signal for Richardson HOD (red) and Kayo-Oguri HOD (black)

Kayo-Oguri HOD (black) Richardson et al. HOD (red)