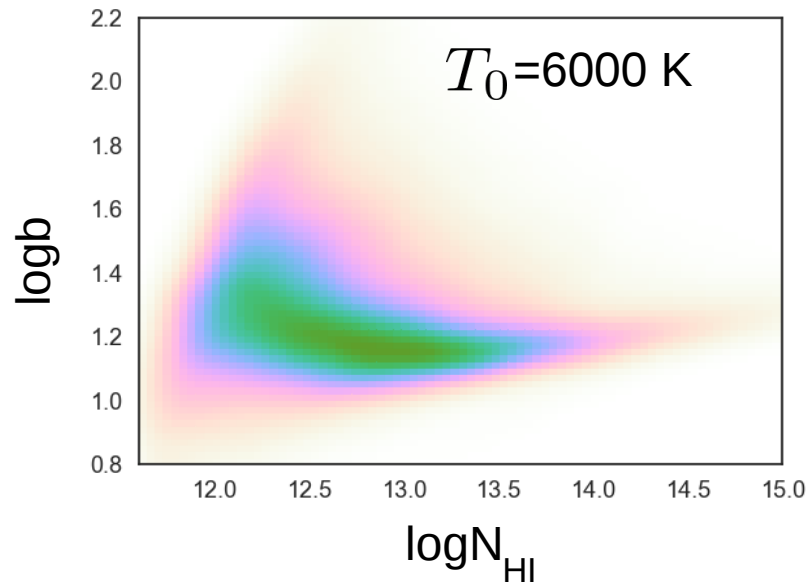
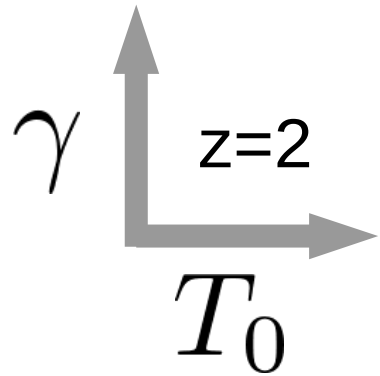


Hector Hiss (MPIA Heidelberg Germany)

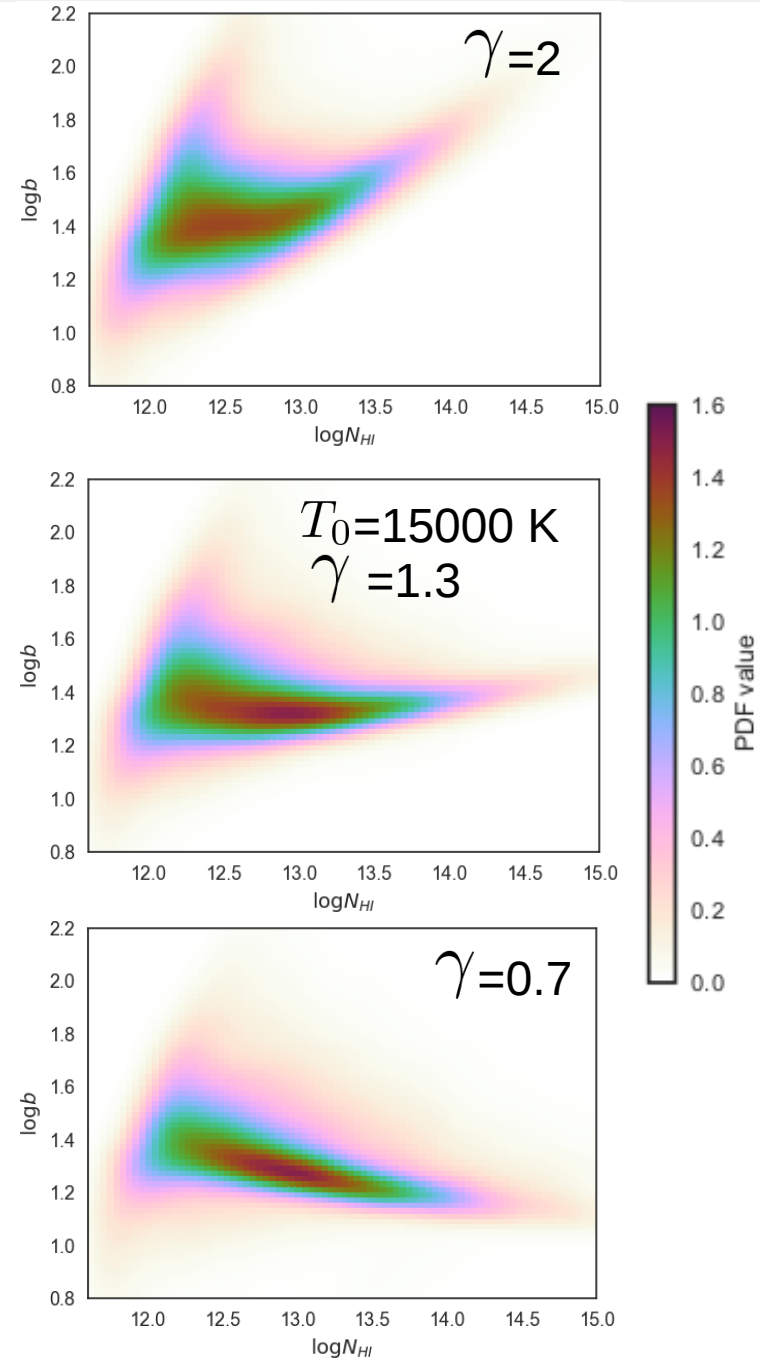
J. Hennawi (UCSB), M. Walther (UCSB, MPIA), J. Oñorbe (IfA)

Lyman- α forest absorption line statistics

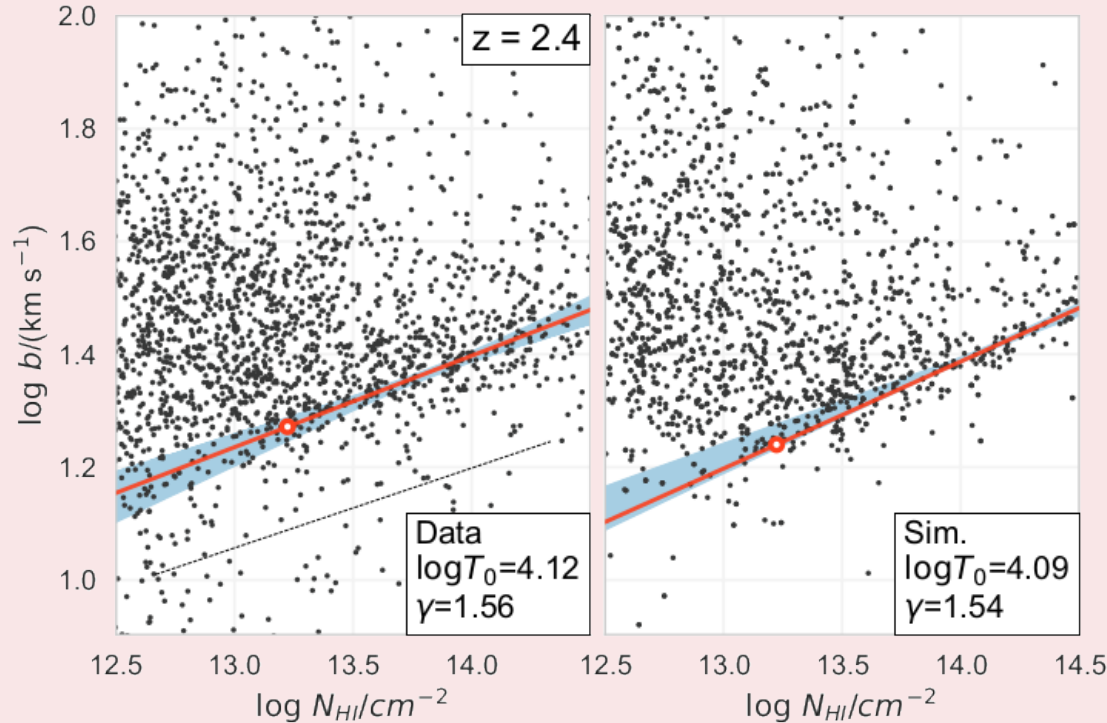
➡ Thermal sensitivity of $\log b$ vs $\log N_{\text{HI}}$



$$T = T_0 \left(\frac{\rho}{\rho_0} \right)^{\gamma-1}$$



Hector Hiss (MPIA Heidelberg Germany)



Traditional Method Cutoff Fitting

Hiss et al. 18 submitted
Schaye et al. 1999, Ricotti et al. 2000,
McDonald et al 2001, Rudie et al 2012, Bolton
et al 2014, Rorai et al 2018

New Method Whole bN distribution

Using **K**ernel **D**ensity **E**stimation!
Proof of concept at $z=2$ in prep.

