

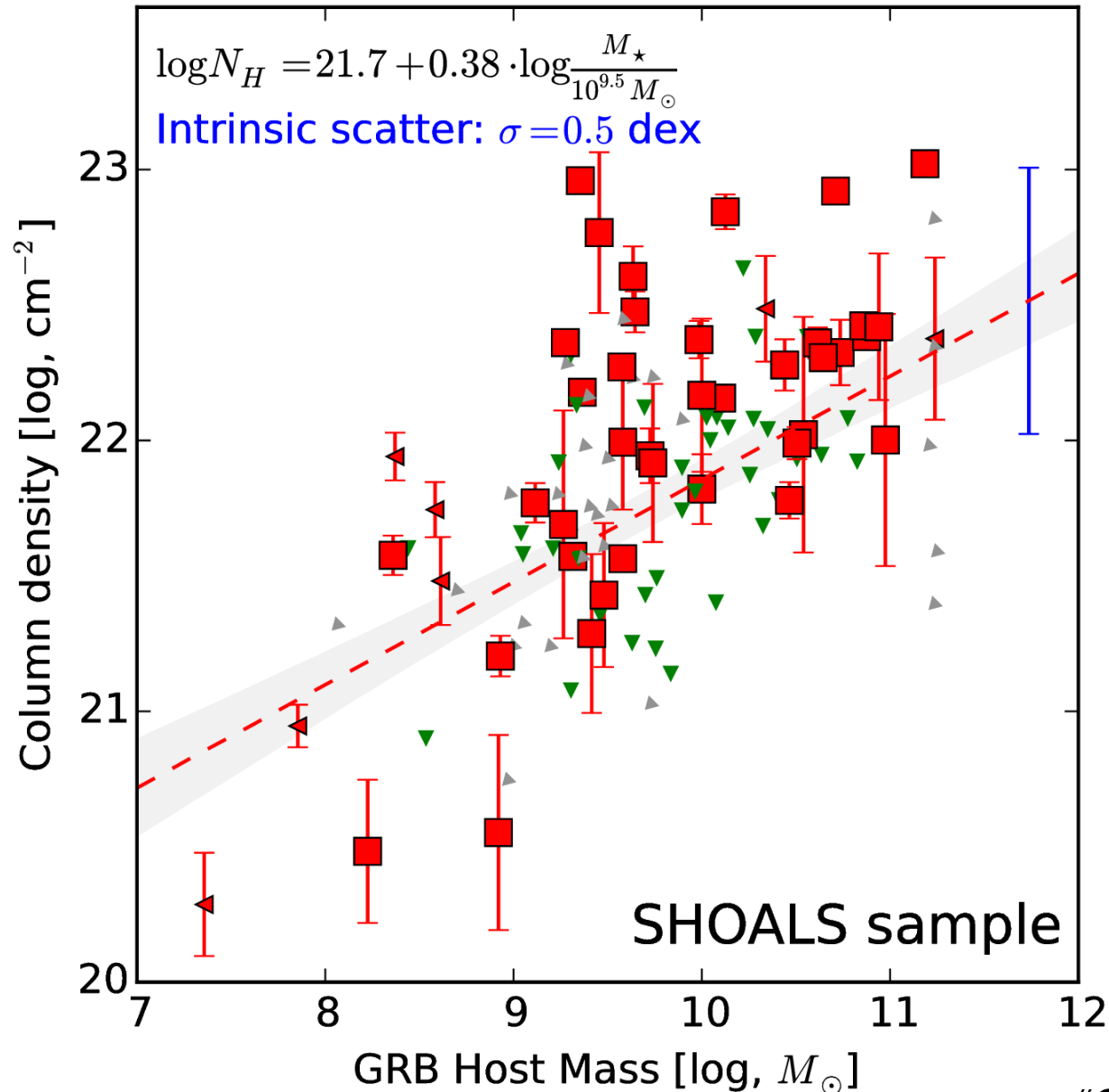
# **Separating the nuclear and galaxy-scale obscuration in AGN**

Keywords: AGN, GRB, Gas in galaxies

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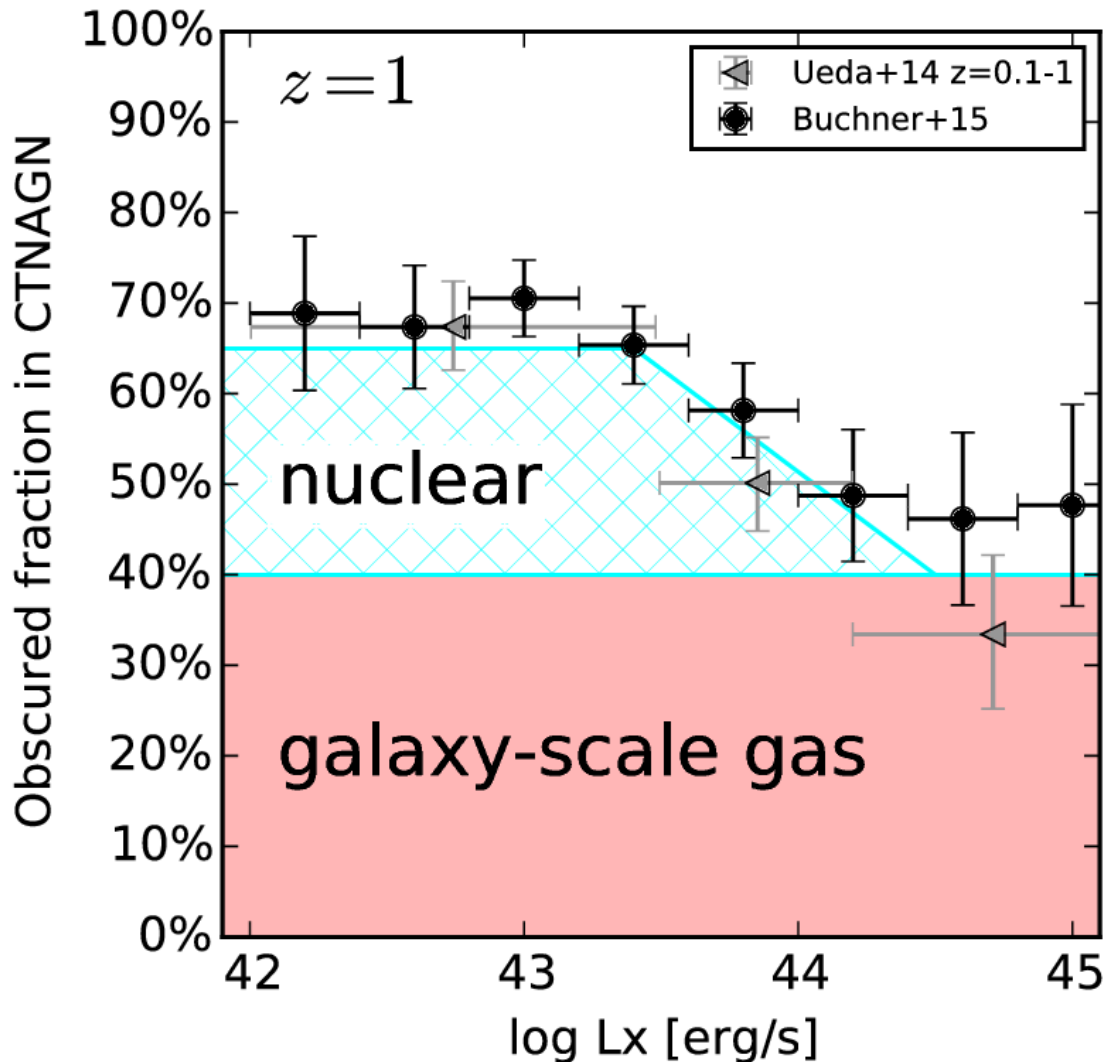
Collaborators: @PUC: Steve Schulze, Franz Bauer

# GRBs x-ray host galaxies



- Unbiased Sample (SHOALS)
- Redshift complete
- Spitzer masses
- $N_H \sim M^{1/3}$
- Redshift-indep.

# Host obscuration of AGN



- Re-weight by AGN mass distribution
- Host obscured fraction:
  - ~40% Compton-thin
  - 0% Compton-thick
- New Torus model
  - $f_{\text{cov}}(L_X, z, \text{MBH})$

“Galaxy gas as obscurer: II. Separating the galaxy-scale and nuclear obscurers of Active Galactic Nuclei”  
Buchner, Schulze & Bauer (submitted)