

MNRAS: MN-18-2966-MJ

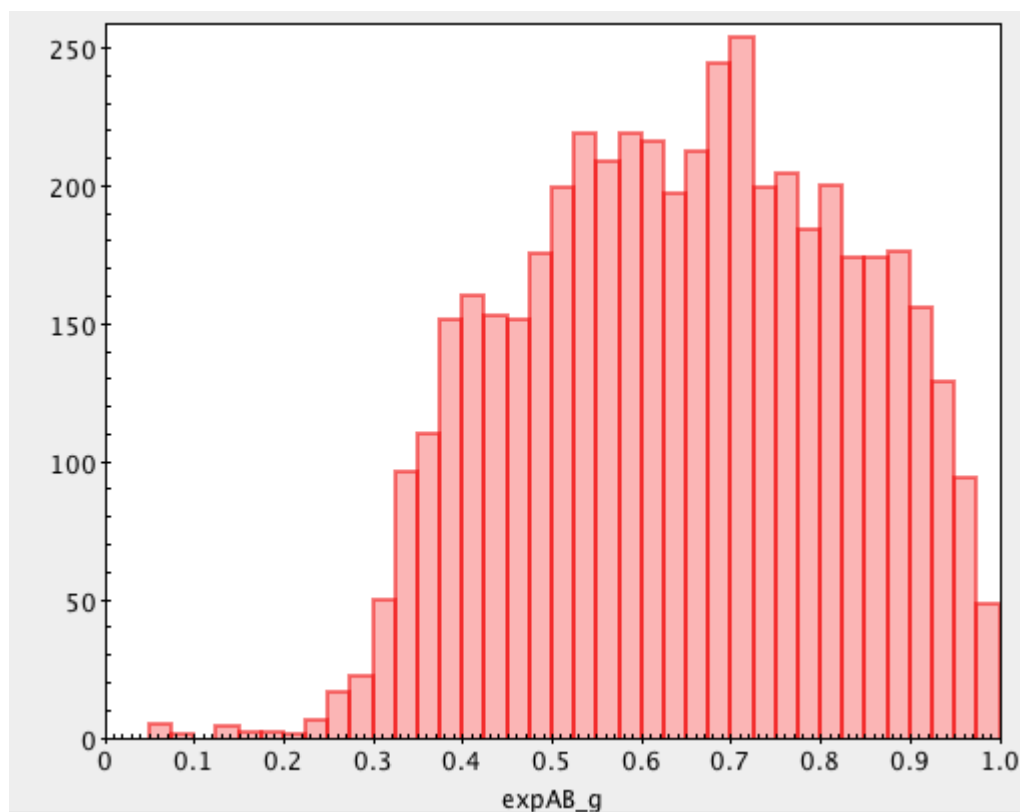
Rebecca Smethurst <Rebecca.Smethurst@nottingham.ac.uk>
To: Karen Masters <klmasters@haverford.edu>

Wed, Sep 5, 2018 at 1:51 PM

Hi Karen,

Plots attached for bins with spacing $0.2 \exp(b/a)$ - there's some small number statistics in some of the $p_{\text{bar}} > 0.5$ bins but it doesn't look like inclination affects the result at all to me.

Of the 4830 galaxies in the original fits table in the GitHub repo - CasJobs returned 4814 matches with `expAB_g` estimates. However 2 of those were -9999 values, giving 4812 galaxies. This is what the distribution looks like, we're definitely skewed toward more face on things:



The bin edges in `expAB_g` were then chosen to give roughly equal numbers in each bin:

- 1595 for $0.0 < \text{expAB}_g < 0.56$
- 1594 for $0.56 < \text{expAB}_g < 0.74$
- 1623 for $0.74 < \text{expAB}_g < 1.0$

I've reproduced each of the figures in these bins and attached them. Let me know if you want any different bins doing, the rolling median lines removing or perhaps redoing with $\exp(a/b)$ in a different band.

Cheers

Becky

Rebecca Smethurst

===

Ogden Trust Sixty Symbols Fellow
School of Physics & Astronomy
University of Nottingham
University Park
Nottingham
NG7 2RD
+44 7515 715 844
rebecca.smethurst@nottingham.ac.uk
Twitter: @becky1505
www.youtube.com/sixtysymbols



Pixels, not paper.

[Quoted text hidden]

[Quoted text hidden]

6 attachments



bulge_armwinding_rolling_median_expAB_gtr_0.74_ltn_1.0.pdf
158K



bulge_armwinding_rolling_median_expAB_gtr_0.56_ltn_0.74.pdf
159K



bulge_armwinding_rolling_median_expAB_gtr_0.0_ltn_0.56.pdf
159K



bulge_armwinding_split_bar_rolling_median_expAB_gtr_0.74_ltn_1.0.pdf
197K



bulge_armwinding_split_bar_rolling_median_expAB_gtr_0.56_ltn_0.74.pdf
199K



bulge_armwinding_split_bar_rolling_median_expAB_gtr_0.0_ltn_0.56.pdf
196K