

SAUNAS: III. X-ray Scaling Relations of Diffuse Hot Gas Galactic Halos^{*}

ALEJANDRO S. BORLAFF¹ AND PAMELA M. MARCUM²

¹*Bay Area Environmental Research Institute, Moffett Field, CA 94035, USA*

²*NASA Ames Research Center, Moffett Field, CA 94035, USA*

ABSTRACT

Put the abstract here.

1. BACKGROUND

Here is the intro section (Aguerri et al. 1998; Bell et al. 2006b,a).

The first sentence in the intro!

The second sentence in the intro (Erwin & Debattista 2017; Falchi et al. 2016).

A 3rd sentence in the background.

Here is a comment, see if it changes color like it is supposed to.

1.1. *Motivation*

The first sentence under motivation. (Bernardi et al. 2006)

1.2. *more motivation*

second sentence under motivation.

Third sentence right here right NOW!!

4th sentence

5th sentence here

1.2.1. *Goals*

First sentence in this section underneath Goals.

2. METHODS

First sentence in methods section.

Facilities: Chandra

Software: CIAO, LIRA, VorBin

^{*} Released on May, 11th, 2023



Figure 1. Optical spectral energy distribution (SED) of NGC 5084 as detected by the 6dF survey and the APO/DIS observations. *Top panel:* 4300-7000 Å spectrum of the central 1.5 arcsec slit (APO/DIS, blue and red channels, in color) and the 6.7 arcsec radius fiber (6dF, black). *Bottom left:* Detail of the $H\gamma$ spectral range (4200 – 4550 Å), showing the core as detected by 6dF and APO/DIS, as well as the North, South, East, and West subregions avoiding the core. See the labels on each spectra. *Bottom right:* Same as previous for the 6400-6800 Å ($H\alpha$) range. Vertical shadowed red lines represent the redshifted wavelengths of the typical absorption and emission lines in galaxies ($H\beta$, OIII, Mg, Na I, $H\alpha$), for reference.

REFERENCES

- Aguerri, J. A. L., Beckman, J. E., & Prieto, M. 1998, *AJ*, 116, 2136, doi: [10.1086/300615](https://doi.org/10.1086/300615)
- Bell, E. F., Phleps, S., Somerville, R. S., et al. 2006a, *ApJ*, 652, 270, doi: [10.1086/508408](https://doi.org/10.1086/508408)
- Bell, E. F., Naab, T., McIntosh, D. H., et al. 2006b, *ApJ*, 640, 241, doi: [10.1086/499931](https://doi.org/10.1086/499931)
- Bernardi, M., Nichol, R. C., Sheth, R. K., Miller, C. J., & Brinkmann, J. 2006, *AJ*, 131, 1288, doi: [10.1086/499522](https://doi.org/10.1086/499522)
- Erwin, P., & Debattista, V. P. 2017, *MNRAS*, 468, 2058, doi: [10.1093/mnras/stx620](https://doi.org/10.1093/mnras/stx620)
- Falchi, F., Cinzano, P., Duriscoe, D., et al. 2016, , 2, e1600377, doi: [10.1126/sciadv.1600377](https://doi.org/10.1126/sciadv.1600377)