Compiled: 02:33 Monday 12<sup>th</sup> August, 2024 (UTC) DRAFT VERSION MONDAY 12<sup>TH</sup> AUGUST, 2024 Typeset using IATEX **modern** style in AASTeX631

# SAUNAS: III. X-ray Scaling Relations of Diffuse Hot Gas Galactic Halos\*

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### 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)

second sentence under motivation.

Third sentence right here right NOW!!

4th sentence

5th sentence here

## 1.1.1. *Goals*

First sentence in this section underneath Goals.

## 2. METHODS

First sentence in methods section.

Facilities: Chandra

Software: CIAO, LIRA, VorBin

## REFERENCES

<sup>\*</sup> Released on May, 11th, 2023

Aguerri, J. A. L., Beckman, J. E., & Prieto, M. 1998, AJ, 116, 2136, doi: 10.1086/300615

Bell, E. F., Phleps, S., Somerville, R. S., et al. 2006a, ApJ, 652, 270, doi: 10.1086/508408

Bell, E. F., Naab, T., McIntosh, D. H.,et al. 2006b, ApJ, 640, 241,doi: 10.1086/499931

Bernardi, M., Nichol, R. C., Sheth, R. K., Miller, C. J., & Brinkmann, J. 2006, AJ, 131, 1288, doi: 10.1086/499522
Erwin, P., & Debattista, V. P. 2017, MNRAS, 468, 2058, doi: 10.1093/mnras/stx620
Falchi, F., Cinzano, P., Duriscoe, D., et al. 2016, , 2, e1600377,

doi: 10.1126/sciadv.1600377