

## Employment History

- Research Fellow in Statistics, The University of Leeds (Sept. 2020 – )
- Teaching Assistant, The University of Sheffield (Jan. 2015 – Dec. 2019)

## Education

- PhD Statistical Astronomy, The University of Sheffield (awarded: 4<sup>th</sup> Dec. 2020)  
Title: A statistical investigation into the relationship between supermassive black hole growth and star formation, supervisors: James Mullaney and Kevin Walters, examiners: James Aird and Simon Goodwin
- MMath Mathematics, Upper Second Class (Honours), The University of Sheffield (Sept. 2012 – June 2016)  
Research Project: Bayesian skew models for panel data, supervisor: Miguel Juarez

## Publication List

### Submitted or in prep

11. J.C-S. Pierce, C. Tadhunter, Y. Gordon, L.P. Grimmatt, L. Makrygianni, C. O’Dea and S. Ellison, “Do AGN triggering mechanisms vary with radio power?” [in prep, contributing author]
10. E. Bernhard, C. Tadhunter, J.R. Mullaney, L.P. Grimmatt, D.J. Rosario and D.M. Alexander (submitted), “The post-Herschel view of intrinsic AGN emission: constructing templates for galaxy and AGN emission at IR wavelengths”, *Monthly Not. Roy. Astron. Soc.* [contributing author, 10%]

### 2020

9. L.P. Grimmatt, “A statistical investigation into the relationship between supermassive black hole growth and star formation”, PhD thesis, Department of Physics and Astronomy, The University of Sheffield
8. L.P. Grimmatt, J.R. Mullaney, E. Bernhard, C.M. Harrison, D.M. Alexander, F. Stanley, V.A. Masoura and K. Walters, “A binning-free method reveals a continuous relationship between galaxies’ AGN power and offset from the main sequence”, *Monthly Not. Roy. Astron. Soc.* **495**, pp. 1392-1402. [lead author]
7. I. Delvecchio, E. Daddi, J. Aird, J.R. Mullaney, E. Bernhard, L.P. Grimmatt, R. Carraro, A. Cimatti, G. Zamorini, N. Caplar, F. Vito, D. Elbaz and G. Rodighiero (2020), “The evolving AGN duty cycle in galaxies since  $z\sim 3$  as encoded in the X-ray luminosity function”, *The Astrophysical Journal* **892**. [contributing author, 10%]
6. A. Bottrill, M. Haigh, M. Hole, S. Theakston, R. Allen, L.P. Grimmatt and R.J. Parker (2020), “Exoplanet detection and its dependence on stochastic sampling of the stellar Initial Mass Function”, *The Astrophysical Journal* **895**. [contributing author, 15%]

### 2019

5. I. Delvecchio, E. Daddi, F. Shankar, J.R. Mullaney, G. Zamorini, J. Aird, E. Bernhard, A. Cimatti, D. Elbaz, M. Giavalisco and L.P. Grimmatt (2019), “The Galaxy’s gas content regulated by the Dark Matter Halo mass results in a superlinear  $M_{\text{BH}} - M^*$  relation”, *The Astrophysical Journal letters* **885**. [contributing author, 5%]

4. C. Schoettler, R.J. Parker, B. Arnold, L.P. Grimmer, J. de Bruijne and N.J. Wright(2019), “Dynamical evolution of star-forming regions: III. Unbound stars and predictions for Gaia”, *Monthly Not. Roy. Astron. Soc.* **486**, pp. 4615-4630 [contributing author, 5%]
3. L.P. Grimmer, J.R. Mullaney, S. Jin, E. Bernhard, E. Daddi and K. Walters (2019), “Revealing the differences in the SMBH accretion rate distributions of starburst and non-starburst galaxies”, *Monthly Not. Roy. Astron. Soc.* **487**, pp. 4071-4082. [lead author]
2. E. Bernhard, L.P. Grimmer, J.R. Mullaney, E. Daddi, C. Tadhunter and S. Jin (2019), “Inferring a difference in the star-forming properties of lower versus higher X-ray luminosity AGNs”, *Monthly Not. Roy. Astron. Soc. Letters* **483**, pp. 52-57. [second author, 40%]
1. E. Bernhard, J.R. Mullaney, J. Aird, R. Hickox, M.L. Jones, F. Stanley, L.P. Grimmer, E. Daddi (2019), “Evidence for a mass-dependent AGN Eddington ratio distribution via the flat relationship between SFR and AGN luminosity”, *Monthly Not. Roy. Astron. Soc. Letters* **476**, pp. 436-450. [contributing author, 5%]

Impact Factor of published journals:

*Monthly Not. Roy. Astron. Soc.* – 5.356, *The Astrophysical Journal* – 5.745

## Teaching Experience

- Lead tutorial demonstrator: Introduction to programming in python (2018-2019)
- Problems class assistant: Introduction to probability and statistics, Galaxies, Stellar Structure and Evolution, Astronomical Spectroscopy (2016-2019)

## Professional Experience

- Committee Member, Royal Statistics Society Official Statistics Section (Dec. 2020 – present)
- Reviewer, *The Astrophysical Journal* (Nov. 2020 – present)
- Gradstat status, Royal Statistics Society (Aug. 2020 – present)
- Behaviour in Teams Observer, The University Sheffield (Dec. 2017 – May 2018)

## Presentations and conferences

- “The statistics of galaxies”, Cyber Café Scientifique, [https://youtu.be/O\\_p44fiVcos](https://youtu.be/O_p44fiVcos) (June 2020)
- “Early outbreak detection for proactive crisis management using twitter data: COVID-19 a case study in the US”, in-house paper review presentation, Department of Physics and Astronomy, The University of Sheffield (May 2020)
- “A continuous relationship between star formation rate distributions and AGN power”, invited seminar, University of Leicester, UK. (Feb. 2020)
- “Planck evidence for a closed Universe and a possible crisis for cosmology”, in-house paper review presentation, Department of Physics and Astronomy, The University of Sheffield (Nov. 2019)
- “Revealing the differences in the SMBH accretion rate distributions of starburst and non-starburst galaxies”, conference presentation, *From AGN to starburst: A Multi-wavelength synergy*, Guiyang, China. (Aug. 2019)
- “Revealing the differences in the SMBH accretion rate distributions of starburst and non-starburst galaxies”, conference presentation, *Supermassive Black Holes: Environment and Evolution*, Corfu, Greece. (June 2019)
- “Should we retire statistical significance?”, in-house paper review presentation, Department of Physics and Astronomy, The University of Sheffield (May 2019)
- “A sextet of clusters in the Vela OB2 region revealed by GAIA”, in-house paper review presentation, Department of Physics and Astronomy, The University of Sheffield (Aug. 2018)

- “Revealing the differences in the SMBH accretion rate distributions of starburst and non-starburst galaxies”, poster presentation, *European Week of Astronomy and Space Science*, Liverpool, UK. (Apr. 2018)
- “The random walk of cars and their collision probabilities”, in-house paper review presentation, Department of Physics and Astronomy, The University of Sheffield (Feb. 2018)