Publication List

- 34. Khan, F. M., <u>B. L. Davis</u>, A. V. Macciò, & K. Holley-Bockelmann (2025) "Where Have All the Little Red Dots Gone? Supermassive Black Hole Binary Dynamics and Its Impact on Galaxy Properties," *ApJL*, **986**, L1 **Citations = 2**
- 33. Jin, Z., M. Pasquato*, <u>B. L. Davis</u>*, T. Deleu, Y. Luo, C. Cho, P. Lemos, L. Perreault-Levasseur, Y. Bengio, X. Kang, A. V. Maccio, & Y. Hezaveh (2025) "Causal Discovery in Astrophysics: Unraveling Supermassive Black Hole and Galaxy Coevolution," *ApJ*, **979**, 212 **Citations = 1** *These authors contributed equally to this work.
- 32. Waterval, S., A. V. Macciò, T. Buck, A. Obreja, C. Cho, Z. Jin, <u>B. L. Davis</u>, K. L. Dixon, & X. Kang (2024) "HELLO project: high-z evolution of large and luminous objects," *MNRAS*, **533**, 1463 **Citations = 8**
- 31. <u>Davis, B. L.</u>, A. W. Graham, R. Soria, Z. Jin, I. D. Karachentsev, V. E. Karachentseva, & E. D'Onghia (2024) "Identification of Intermediate-mass Black Hole Candidates among a Sample of Sd Galaxies," *ApJ*, **971**, 123 **Citations = 5**
- 30. Amaro-Seoane, P., et al. (2023) "Astrophysics with the Laser Interferometer Space Antenna," *Living Reviews in Relativity*, **26**, 2 **Citations = 541**
- 29. <u>Davis, B. L.</u> & Z. Jin (2023) "Discovery of a Planar Black Hole Mass Scaling Relation for Spiral Galaxies," *ApJL*, **956**, L22 **Citations = 8**
- 28. Fusco, M. S., <u>B. L. Davis</u>, J. Kennefick, D. Kennefick, & M. S. Seigar (2022) "Probing the low-mass end of the black hole mass function via a study of faint local spiral galaxies," *Universe*, **8**, 649 **Citations** = **5**
- 27. Shields, D., B. Boe, C. Pfountz, <u>B. L. Davis</u>, M. Hartley, R. Miller, Z. Slade, M. S. Abdeen, D. Kennefick, & J. Kennefick (2022) "Spirality: A Novel Way to Measure Spiral Arm Pitch Angle," *Galaxies*, **10**, 100 **Citations** = **19**
- 26. Hon, D. S.-H., A. W. Graham, <u>B. L. Davis</u>, & A. Marconi (2022) "Disc cloaking: Establishing a lower limit to the number density of local compact massive spheroids/bulges and the potential fate of some high-z red nuggets," *MNRAS*, **514**, 3410 **Citations = 19**
- Abdeen, S., B. L. Davis, R. Eufrasio, D. Kennefick, J. Kennefick, R. Miller, D. Shields, E. B. Monson, C. Bassett, & H. O'Mara (2022) "Evidence in favour of density wave theory through age gradients observed in star formation history maps and spatially resolved stellar clusters," MNRAS, 512, 366 Citations = 14
- 24. Sahu, N., A. W. Graham, & <u>B. L. Davis</u> (2022) "The (Black Hole Mass)-(Spheroid Stellar Density) Relations: M $_{BH}$ - μ (and M $_{BH}$ - Σ) and M $_{BH}$ - ρ ," ApJ, **927**, 67 **Citations = 14**
- 23. Sahu, N., A. W. Graham, & <u>B. L. Davis</u> (2022) "The Morphology-dependent Black Hole Host Galaxy Correlations: A Consequence of Physical Formation Processes," *AcAT*, **3**, 39 **Citations** = **2**
- 22. Graham, A. W., R. Soria, <u>B. L. Davis</u>, M. Kolehmainen, T. Maccarone, J. Miller-Jones, C. Motch, & D. A. Swartz (2021) "Central X-Ray Point Sources Found to Be Abundant in Low-mass, Late-type Galaxies Predicted to Contain an Intermediate-mass Black Hole," *ApJ*, **923**, 246 **Citations = 8**
- 21. Graham, A. W., R. Soria, B. C. Ciambur, <u>B. L. Davis</u>, & D. A. Swartz (2021) "Potential Black Hole Seeding of the Spiral Galaxy NGC 4424 via an Infalling Star Cluster," *ApJ*, **923**, 146 **Citations = 17**
- 20. <u>Davis, B. L.</u> & A. W. Graham (2021) "Refining the mass estimate for the intermediate-mass black hole candidate in NGC 3319," *PASA*, **38**, E030 **Citations = 7**
- 19. Sahu, N., A. W. Graham, & <u>B. L. Davis</u> (2020) "Defining the (Black Hole)-Spheroid Connection with the Discovery of Morphology-dependent Substructure in the $M_{\rm BH}$ -n $_{sph}$ and $M_{\rm BH}$ -R $_{e,sph}$ Diagrams: New Tests for Advanced Theories and Realistic Simulations," ApJ, **903**, 97 **Citations = 26**
- 18. Abdeen, S., D. Kennefick, J. Kennefick, R. Miller, D. W. Shields, E. B. Monson, & <u>B. L. Davis</u> (2020) "Determining the co-rotation radii of spiral galaxies using spiral arm pitch angle measurements at multiple wavelengths," *MNRAS*, **496**, 1610 **Citations = 17**
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- 14. Miller, R., D. Kennefick, J. Kennefick, M. Shameer Abdeen, E. Monson, R. T. Eufrasio, D. W. Shields, & <u>B. L. Davis</u> (2019) "Investigating the Origins of Spiral Structure in Disk Galaxies through a Multiwavelength Study," *ApJ*, **874**, 177 **Citations** = **24**

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- 12. Davis, B. L., A. W. Graham, & E. Cameron (2019) "Black Hole Mass Scaling Relations for Spiral Galaxies. I. $\overline{M_{BH}}$ – $M_{*,sph}$," ApJ, 873, 85 Citations =101
- 11. Davis, B. L., A. W. Graham, & E. Cameron (2018) "Black Hole Mass Scaling Relations for Spiral Galaxies. II. $\overline{M_{BH}}$ – $M_{*,tot}$ and M_{BH} – $M_{*,disk}$," ApJ, **869**, 113 **Citations = 85**
- 10. <u>Davis, B. L.</u>, A. W. Graham, & M. S. Seigar (2017) "Updating the (supermassive black hole mass)-(spiral arm pitch angle) relation: a strong correlation for galaxies with pseudobulges," *MNRAS*, **471**, 2187 **Citations** = **67**
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- 5. <u>Davis, B. L.</u> (2015) "Logarithmic Spiral Arm Pitch Angle of Spiral Galaxies: Measurement and Relationship to Galactic Structure and Nuclear Supermassive Black Hole Mass," *University of Arkansas*, PhDT
- 4. Seigar, M. S., <u>B. L. Davis</u>, J. Berrier, & D. Kennefick (2014) "Constraining Dark Matter Halo Profiles and Galaxy Formation Models Using Spiral Arm Morphology. II. Dark and Stellar Mass Concentrations for 13 Nearby Face-on Galaxies," *ApJ*, **795**, 90 **Citations = 20**
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