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## PUBLICATIONS

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I am an author on **90+** papers that have **7900+** citations ([h-index=34](#)). This includes:  
10+ papers as (co-)lead author with 2300+ citations ([h-index=10](#))  
25+ papers with significant contributions with 2200+ citations ([h-index=16](#))  
5+ papers led by students (in **blue**) with 45+ citations ([h-index=3](#))

Most of my papers can be found online on [arxiv](#) and [ADS](#). My ORCID is [0000-0003-2573-9832](#).

### (Co-)Lead Author

12. **Speagle, J. S.** et al. [20 additional co-authors], accepted to The Astrophysical Journal  
Mapping the Milky Way in 5-D with 170 Million Stars
11. **Speagle, J. S.** et al. [20 additional co-authors], submitted to The Astrophysical Journal  
Deriving Stellar Properties, Distances, and Reddenings from Photometry and Astrometry with *brutus*
10. **Iyer, K. G. & Speagle, J. S.**; Caplar, N.; Forbes, J. C.; Gawiser, E.; Leja, J.; & Tacchella, S., accepted to The Astrophysical Journal  
Stochastic Modelling of Star Formation Histories III. Constraints from Physically-Motivated Gaussian Processes  
arxiv: [2208.05938](#)
9. **Portillo, S. K. N. & Speagle, J. S.**; & Finkbeiner, D. P., 2020, The Astronomical Journal, Vol. 159, Iss. 4, id. 165  
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arxiv: [1902.02374](#)      **Media:** [AAS](#)
8. **Speagle, J. S.**, 2020, Monthly Notices of the Royal Astronomical Society, Vol. 493, Iss. 3, p. 3132-3158  
*dynesty*: A Dynamic Nested Sampling Package for Estimating Bayesian Posteriors and Evidences  
arxiv: [1904.02180](#)

7. **Speagle, J. S.** et al. [11 additional co-authors], 2019, Monthly Notices of the Royal Astronomical Society, Vol. 490, Iss. 4, p. 5658-5677  
Galaxy-Galaxy Lensing in HSC: Validation Tests and the Impact of Heterogeneous Spectroscopic Training Sets  
arxiv: [1906.05876](https://arxiv.org/abs/1906.05876)
6. **Zucker, C. & Speagle, J. S.**; Schlafly, E. F.; Green, G. M., Finkbeiner, D. P.; Goodman, A. A.; & Alves, J., 2019, The Astrophysical Journal, Vol. 879, Iss. 2, id. 125  
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5. **Speagle, J. S.** & Eisenstein, D. J., 2017, Monthly Notices of the Royal Astronomical Society, Vol. 469, Iss. 1, p. 1205-1224  
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4. **Speagle, J. S.** & Eisenstein, D. J., 2017, Monthly Notices of the Royal Astronomical Society, Vol. 469, Iss. 1, p. 1186-1204  
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3. **Speagle, J. S.**; Capak, P. L.; Eisenstein, D. J.; Masters, D. C.; & Steinhardt, C. L., 2016, Monthly Notices of the Royal Astronomical Society, Vol. 461, Iss. 4, p. 3432-3442  
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2. **Speagle, J. S.**; Steinhardt, C. L.; Capak, P. L.; & Silverman, J. D., 2014, The Astrophysical Journal Supplement Series, Vol. 214, Iss. 2, id. 15  
A Highly Consistent Framework for the Evolution of the Star-Forming ‘Main Sequence’ from  $z \sim 0-6$   
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1. **Speagle, J. S.**; Kaplan, D. L.; & van Kerkwijk, M. H., 2011, The Astrophysical Journal, Vol. 743, Iss. 2, id. 183  
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**(Co-)Lead Author (Non-Refereed)**

2. **Speagle, J. S.** & Eadie, G. M., 2021, Nature Astronomy, Vol. 5, p. 971-972

- Making the Sum Greater than its Parts
1. **Speagle, J. S.**, 2019, arxiv e-print  
A Conceptual Introduction to Markov Chain Monte Carlo Methods  
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### Significant Contribution

27. **Berek, S. C.**; Eadie, G. M.; **Speagle, J. S.**; & Harris, W. E., 2023, The Astrophysical Journal, Vol. 955, Iss. 1, id. 22  
The HERBAL Model: A Hierarchical Errors-in-variables Bayesian Lognormal Hurdle Model for Galactic Globular Cluster Populations  
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24. Wang, B.; Leja, J.; Villar, V. A.; & **Speagle, J. S.**, 2023, The Astrophysical Journal Letters, Vol. 952, Iss. 1, id. L10  
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- Monte Carlo Techniques for Addressing Large Errors and Missing Data in Simulation-based Inference  
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### Contributing Author

47. McCullough, J. et al. [48 additional co-authors including **Speagle, J. S.**], 2023, submitted to The Astrophysical Journal  
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