Dr. David Moïse Nataf

Astronomer

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Education

2010-2012 **PhD**, *Astronomy*, The Ohio State University, Columbus, Ohio.

2003-2007 **B.Sc.**, *Joint Honours Mathematics & Physics*, McGill University, Montréal, Canada.

Experience

2022– **Associate Research Scientist**, *Johns Hopkins University*, Baltimore, MD.

2019–2022 **Assistant Research Scientist**, *Johns Hopkins University*, Baltimore, MD.

2016–2019 **Allan and Dorothy Davis Fellowship**, *Johns Hopkins University*, Baltimore, MD.

2012–2016 **Research Fellow**, *The Australian National University*, Canberra, Australia.

2007-2012 **Graduate Teaching and Research Associate**, *The Ohio State University*, Columbus, Ohio.

2004 **Gold Miner**, *Cambior, Inc*, Amos, Quebec.

External Research Funding as Principal Investigator

2024-2027 JWST-GO-03322 , PI, "*Determination of the Star-by-Star Elemental Abundance Trends in Nearby Galaxies: Are the Disks Bimodal?,*" $198,867.00

2023-2026 HST-GO-17173, PI, "*Correcting for the Effects of Interstellar Extinction Toward the Roman Galactic Exoplanet Survey Fields,*" $84,465.00

2022-2025 NASA-21-XRP21-0114, PI, "*A Three-dimensional Extinction Map for Microlensing Planet Discovery and Characterization,*" $624,464.00

2022-2025 JWST-GO-02301 , Grant-PI, "*Unearthing the Fossilized Andromeda Galaxy: A Spectroscopic Pilot Survey of M31 Giants,*" $107,000.00

2018-2023 NASA-18-ADAP18-018, PI, "*Characterization of Dust in the Era of Large Surveys: From Extinction in the Ultraviolet to Emission in the Microwave*", $400,302.00

Teaching Experience and Credentials

July 3th - August 4th, 2023 **AS.171.108.83.SU23**, *General Physics for Physical Science Majors (Active Learning)*, Electricity & Magnetism, 4-credit intensive course at Johns Hopkins University.

July 5th - August 5th, 2022 **AS.171.108.83.SU22**, *General Physics for Physical Science Majors (Active Learning)*, Electricity & Magnetism, 4-credit intensive course at Johns Hopkins University.

July 12th - August 20th, 2021 **AS.171.108.83.SU21**, *General Physics for Physical Science Majors (Active Learning)*, Electricity & Magnetism, 4-credit intensive course at Johns Hopkins University.

2017-2021 **Johns Hopkins Teaching Academy**, *Certification of completion of the three-part training program in evidence-based and active-learning pedagogical methods*.

Supervision Experience

2023 – **Primary adviser for Christian Faulhaber, JHU undergraduate student**, *The impact of stellar CNO abundance variations on James Webb Space Telescope Observations*.

2020 - 2023 **Primary adviser for Kyle Schneider, JHU undergraduate student**, *Globular cluster Mira variables in ASAS-SN, Gaia, and WISE data*.

2018 - 2020 **Primary adviser for Katherine Xiang, JHU undergraduate student**, *Buckling bars in nearly face-on galaxies observed with MaNGA*, Paper accepted for publication in *The Astrophysical Journal*.

2017 - 2018 **Primary adviser for Wenzer Qin, JHU undergraduate student**, *The Mira-based distance to the Galactic center*, Paper published in *The Astrophysical Journal*, 865, 47.

Selected Service Experience

2021 Research scientist representative to the Johns Hopkins Physics & Astronomy Committee on Diversity and Inclusion

2017 Scientific Organizing Committee member; 22nd International Microlensing Conference

2017 - 2019 Organizer; Johns Hopkins Summer Undergraduate Research Lecture Series

2017– Volounteer (Foster Father, Dog Deputy, Nursery Nanny), *Maryland SPCA*

2017 Member; Joint Johns Hopkins / Space Telescope Science Institute Colloquium Committee

Nancy Grace Roman Telescope-specific Service Experience

2020 Advocate; WFIRST Advocacy Day on Capitol Hill

2018 Organizer; WFIRST Microsit Meeting at JHU/STScI

2016– Collaborator; WFIRST Science Investigation Team for the Bulge Microlensing Planet Program

JWST-Specific Service Experience

2021 Scientific Organizing Committee Co-chair; IAU Symposium 377, "*Early Disk-Galaxy Formation from JWST to the Milky Way*", to be held in Kuala Lumpur, Malaysia, in 2022

2020 Organizer; JWST Proposal Writing Workshop at Johns Hopkins University

Referee and Review Panel Experience

These are not dated due to privacy considerations.

Hubble Space Telescope Review Panel (Space Telescope Science Institute)

ADAP Review Panel (NASA)

TESS Review Panel (NASA)

Early Career Reward Review Panel (NSF)

Fondecyt (Chile)

China Telescope Access Program (China)

Agence Nationale de la Recherche (France)

Referee for *The Astrophysical Journal*, *The Astronomical Journal*, *The Monthly Notices of the Royal Astronomical Society*, *Astronomy & Astrophysics*, and *Acta Astronomica*

Selected Allocations of Telescope Time as Principal Investigator

2022 Determination of the Star-by-Star Elemental Abundance Trends in Nearby Galaxies: Are the Disks Bimodal?, James Webb Space Telescope, 16 hours

2022 Correcting for the Effects of Interstellar Extinction Toward the Roman Galactic Exoplanet Survey Fields, Hubble Space Telescope, 7 orbits

2021 Precision Chemical Abundances of RR Lyrae Stars, APO 3.5 Meter Telescope, 11 half-nights

2018 RR Lyrae Variable Stars, TESS, 59 targets

2016 The Age and Helium Abundance of Milky Way Bulge Stars, Magellan/Clay M2FS, 1 night

Awards and Honours

2016 Allan C. and Dorothy H. Davis Fellowship

2012 HUBBLE Postdoctoral Fellowship (Declined)

2011 NSERC Postgraduate Fellowship, PGSD3-403304-2011

Conference Talks

June 2023 **RR Lyrae Stars as Calibrators of the Local Distance Scale**, *The Transient and Variable Universe 2023*, Urbana-Cahmpagne, Illinois.

May 2019 **The Relationship Between Globular Cluster Parameters and Abundance Variations, and Application to Former Globular Cluster Stars in the Field**, *IAU Symposium 351, "Star Clusters: from the Milky Way to the Early Universe"*, Bologna, Italy.

April 2019 **SOS to Extragalactic Astronomers: Some Unsolved Mysteries in Milky Way Archaeology**, *MaNGA Collaboration Meeting*, Oxford, United Kingdom.

January 2019 **Properties of Former Second-Generation Globular Cluster Stars in the Inner Halo / Bulge field**, *American Astronomical Society*, Seattle, Washington.

December 2018 **The Age and Helium Abundance of the Galactic Bulge**, *The Galactic Bulge at the crossroads, ESO-GBX2018*, Pucon, Chile.

November 2018 **Clues to Chemical Evolution in Current and Former Globular Cluster Stars**, *Chemical evolution and nucleosynthesis across the Galaxy*, Heidelberg, Germany.

November 2018 **Comparative Chemical Evolution Study of Current and Former Globular Cluster Stars**, *Survival of Dense Star Clusters in the Milky Way System*, Heidelberg, Germany.

February 2017 **The Extinction Curve toward the Bulge and Implications for the WFIRST Microlensing Campaign**, *21st International Microlensing Conference*, Pasadena, California.

November 2016 **Was the Galactic Bulge Formed From Hierarchical Collapse, The Buckling Disk Instability, Accretion of Clumps, or All of the Above?**, *Galactic Archaeology and Stellar Physics*, Canberra, Australia.

July 2016 **Review of the Bulge Stellar Population And Comparison to the Nuclear Bulge**, *IAU Symposium 322, "The Multi-Messenger Astrophysics of the Galactic Centre"*, Palm Cove, Australia.

February 2015 **The Only Interstellar Extinction Talk at this Conference**, *Galactic Archaeology and Precision Stellar Astrophysics* , Santa Barbara, California.

January 2015	**NGC 6791: A Review**, *Galactic Archaeology and Precision Stellar Astrophysics* , Santa Barbara, California.
January 2014	**The Age and Helium Abundance of the Galactic Bulge**, *Formation and Evolution of the Galactic Bulge* , Sesto, Italy.
January 2014	**Mapping the X-Shaped Structure of the Galactic Bulge**, *American Astronomical Society*, Seattle, Washington.
May 2013	**The Age and Helium Abundance of the Galactic Bulge**, *Fifty Years of Wide Field Studies in the Southern Hemisphere: Resolved Stellar Populations in the Galactic Bulge and the Magellanic Clouds*, La Serena, Chile.
January 2013	**The Non-Standard (R$\sim$2.5) Extinction Toward the Inner Milky Way**, *American Astronomical Society*, Long Beach, California .

Seminars and Colloquia

April 2023	Florida State University
April 2023	Carnegie Institute
April 2023	Jet Propulsion Laboratory
December 2022	Johns Hopkins University
April 2022	The University of Wyoming
April 2022	University of Hawaii
February 2022	The University of Alabama
February 2022	Virginia Tech
February 2021	The Ohio State University
April 2020	New Mexico State University
October 2019	The University of Utah
June 2019	The Jet Propulsion Laboratory
April 2019	Liverpool John Moores University
March 2019	University of Wisconsin at Madison
December 2018	Pontificia Universidad Catolica de Chile
November 2018	Dipartimento di Astronomia di Padova
October 2018	New Mexico State University
September 2018	Harvard / Center for Astrophysics
July 2018	Space Telescope Science Institute
June 2018	Space Telescope Science Institute
January 2018	Yale University
November 2017	Virginia Tech
February 2017	Johns Hopkins University
August 2016	Australian National University
October 2015	Australian National University
September 2015	University of Sydney

August 2015	Australian Astronomical Observatory
February 2015	The Ohio State University
December 2013	Université de Montréal
December 2013	McGill University
August 2013	Monash University
June 2013	Australian Astronomical Observatory
January 2013	The University of Florida
February 2012	Australian National University
February 2012	The University of Virginia
February 2012	ETH Zurich
October 2011	University of California, Los Angeles
September 2011	Carnegie Institute
September 2011	California Institute of Technology
June 2011	Pontificia Universidad Catolica de Chile
June 2011	ESO Santiago
June 2011	Cerro-Tololo Inter-American Observatory

References

- Professor Rosemary Wyse, Johns Hopkins University,
  ☎: 410-516-5392
  ✉: wyse@jhu.edu
- Professor Nadia Zakamska, Johns Hopkins University,
  ☎: 410-516-6657.
  ✉: zakamska@jhu.edu
- Professor Santi Cassisi, INAF - Osservatorio Astronomico d'Abruzzo,
  ☎: (+39) 0861-439-714
  ✉: santi.cassisi@inaf.it
- Dr. Ricardo Schiavon, Astrophysics Research Institute, Liverpool John Moores University,
  ☎: (+44) 0151 231 2945
  ✉: R.P.Schiavon@ljmu.ac.uk

PUBLICATIONS

Citation indices (NASA Astrophysics Data System), effective November 27th, 2023

Total citations: 4891
Total h-index: 38
First-authored citations: 1227
First-authored h-index: 14

Bibliography on ORCID: https://orcid.org/0000-0001-5825-4431
Bibliography on Google Scholar: https://scholar.google.com/citations?hl=en&user=L6GWQaEAAAAJ

Publications as primary adviser:

2. "Buckling bars in nearly face-on galaxies observed with MaNGA",
   Xiang, K., Nataf, D.M., Athanassoula, E., Zakamska, N., Rowlands, K., Masters, K., Fraser-McKelvie, A., Karjlic, K.,
   2021, *The Astrophysical Journal*, 909, 125
1. "The Mira-based Distance to the Galactic Center",
   Qin, W., Nataf, D. M., Zakamska, N., Wood, P. R., & Casagrande, L.,
   2018, *The Astrophysical Journal*, 865, 47

Publications as first author:

20. "On the Color-Metallicity Relation of the Red Clump and the Reddening Toward the Magellanic Clouds",
    Nataf, D.M., Cassisi, S., Casagrande, L., Yuan, W., Riess, A.,
    2021, *The Astrophysical Journal*, 910, 121
19. "The predicted properties of helium-enriched globular cluster progenitors at high redshift",
    Nataf, D. M., Horiuchi, S., Costa, G., Wyse, R. F. G., Ting, Y.-S., Crocker, R., Federrath, C., & Chen, Y.,
    2020, *Monthly Notices of the Royal Astronomical Society*, 496, 3222
18. "The Relationship between Globular Cluster Mass, Metallicity, and Light-element Abundance Variations",
    Nataf, D. M., Wyse, R. F. G., Schiavon, R. P., Ting, Y.-S., Minniti, D., Cohen, R. E., Fernández-Trincado, J. G., Geisler, D., Nitschelm, C., & Frinchaboy, P. M.,
    2019, *The Astronomical Journal*, 158, 14
17. "Was the Milky Way Bulge Formed from the Buckling Disk Instability, Hierarchical Collapse, Accretion of Clumps, or All of the Above?",
    Nataf, D. M.,
    2017, *Publications of the Astronomical Society of Australia*, 34, e041

16. "The Interstellar Extinction Towards the Milky Way Bulge with Planetary Nebulae, Red Clump, and RR Lyrae Stars",
Nataf, D. M.,
2016, *Publications of the Astronomical Society of Australia*, 33, e024
15. "The Controversial Star-Formation History and Helium Enrichment of the Milky Way Bulge",
Nataf, D. M.,
2016, *Publications of the Astronomical Society of Australia*, 33, e023
14. "Interstellar extinction curve variations towards the inner Milky Way: a challenge to observational cosmology",
Nataf, D. M., Gonzalez, O. A., Casagrande, L., Zasowski, G., Wegg, C., Wolf, C., Kunder, A., Alonso-Garcia, J., Minniti, D., Rejkuba, M., et al.,
2016, *Monthly Notices of the Royal Astronomical Society*, 456, 2692
13. "Uncertainties in the interstellar extinction curve and the Cepheid distance to M101",
Nataf, D. M.,
2015, *Monthly Notices of the Royal Astronomical Society*, 449, 1171
12. "The X-shaped Milky Way bulge in OGLE-III photometry and in N-body models",
Nataf, D. M., Udalski, A., Skowron, J., Szymański, M. K., Kubiak, M., Pietrzyński, G., Soszyński, I., Ulaczyk, K., Wyrzykowski, Ł., Poleski, R., et al.,
2015, *Monthly Notices of the Royal Astronomical Society*, 447, 1535
11. "Red giant branch bump star counts in data and stellar models",
Nataf, D. M.,
2014, *Monthly Notices of the Royal Astronomical Society*, 445, 3839
10. "On the correlation between metallicity and the X-shaped morphology of the Milky Way bulge",
Nataf, D. M., Cassisi, S., & Athanassoula, E.,
2014, *Monthly Notices of the Royal Astronomical Society*, 442, 2075
9. "Reddening and Extinction toward the Galactic Bulge from OGLE-III: The Inner Milky Way's $R_V \sim 2.5$ Extinction Curve",
Nataf, D. M., Gould, A., Fouqué, P., Gonzalez, O. A., Johnson, J. A., Skowron, J., Udalski, A., Szymański, M. K., Kubiak, M., Pietrzyński, G., et al.,
2013, *The Astrophysical Journal*, 769, 88
8. "Red Giant Branch Bump Brightness and Number Counts in 72 Galactic Globular Clusters Observed with the Hubble Space Telescope",
Nataf, D. M., Gould, A. P., Pinsonneault, M. H., & Udalski, A.,
2013, *The Astrophysical Journal*, 766, 77
7. "Reconciling the Galactic Bulge Turnoff Age Discrepancy with Enhanced Helium Enrichment",
Nataf, D. M., & Gould, A. P.,
2012, *The Astrophysical Journal*, 751, L39
6. "Detached Red Giant Eclipsing Binary Twins: Rosetta Stones to the Galactic Bulge",
Nataf, D. M., Gould, A., & Pinsonneault, M. H.,
2012, *Acta Astronomica*, 62, 33

5. "The Gradients in the 47 Tuc Red Giant Branch Bump and Horizontal Branch are Consistent with a Centrally Concentrated, Helium-enriched Second Stellar Generation",
Nataf, D. M., Gould, A., Pinsonneault, M. H., & Stetson, P. B.,
2011, *The Astrophysical Journal*, 736, 94
4. "OGLE-III Detection of the Anomalous Galactic Bulge Red Giant Branch Bump: Evidence of Enhanced Helium Enrichment",
Nataf, D. M., Udalski, A., Gould, A., & Pinsonneault, M. H.,
2011, *The Astrophysical Journal*, 730, 118
3. "The Split Red Clump of the Galactic Bulge from OGLE-III",
Nataf, D. M., Udalski, A., Gould, A., Fouqué, P., & Stanek, K. Z.,
2010, *The Astrophysical Journal*, 721, L28
2. "HAT Discovery of 76 Bright Periodic Variable Stars Toward the Galactic Bulge",
Nataf, D. M., Stanek, K. Z., & Bakos, G. Á.,
2010, *Acta Astronomica*, 60, 261
1. "Finding the Brightest Galactic Bulge Microlensing Events with a Small Aperture Telescope and Image Subtraction",
Nataf, D. M., Stanek, K. Z., & Bakos, G. A.,
2009, *Acta Astronomica*, 59, 255

Publications as a co-author:

55. "Is Terzan 5 the remnant of a building block of the Galactic bulge? Evidence from APOGEE",
Taylor, D. J., Mason, A. C., Schiavon, R. P., Horta, D., Nataf, D. M., Geisler, D., Kisku, S., Phillips, S. G., Cohen, R. E., Fernández-Trincado, J. G., et al.,
2022, *Monthly Notices of the Royal Astronomical Society*,
54. "Evidence for a high-energy tail in the gamma-ray spectra of globular clusters",
Song, D., Macias, O., Horiuchi, S., Crocker, R. M., & Nataf, D. M.,
2021, *Monthly Notices of the Royal Astronomical Society*, 507, 5161
53. "VizieR Online Data Catalog: The GALAH+ Survey DR3 (Buder+, 2021)",
Buder, S., Sharma, S., Kos, J., Amarsi, A. M., Nordlander, T., Lind, K., Martell, S. L., Asplund, M., Bland-Hawthorn, J., Casey, A. R., et al.,
2021, *VizieR Online Data Catalog*, J/MNRAS/506/150
52. "Fundamental relations for the velocity dispersion of stars in the Milky Way",
Sharma, S., Hayden, M. R., Bland-Hawthorn, J., Stello, D., Buder, S., Zinn, J. C., Kallinger, T., Asplund, M., De Silva, G. M., D'Orazi, V., et al.,
2021, *Monthly Notices of the Royal Astronomical Society*,
51. "The GALAH+ survey: Third data release",
Buder, S., Sharma, S., Kos, J., Amarsi, A. M., Nordlander, T., Lind, K., Martell, S. L., Asplund, M., Bland-Hawthorn, J., Casey, A. R., et al.,
2021, *Monthly Notices of the Royal Astronomical Society*,
50. "The Similarity of Abundance Ratio Trends and Nucleosynthetic Patterns in the Milky Way

Disk and Bulge",
Griffith, E., Weinberg, D. H., Johnson, J. A., Beaton, R., García-Hernández, D. A., Hasselquist, S., Holtzman, J., Johnson, J. W., Jönsson, H., Lane, R. R., et al.,
2021, *The Astrophysical Journal*, 909, 77

49. "The contribution of N-rich stars to the Galactic stellar halo using APOGEE red giants",
Horta, D., Mackereth, J. T., Schiavon, R. P., Hasselquist, S., Bovy, J., Allende Prieto, C., Beers, T. C., Cunha, K., García-Hernández, D. A., Kisku, S. S., et al.,
2021, *Monthly Notices of the Royal Astronomical Society*, 500, 5462
48. "Evidence from APOGEE for the presence of a major building block of the halo buried in the inner Galaxy",
Horta, D., Schiavon, R. P., Mackereth, J. T., Pfeffer, J., Mason, A. C., Kisku, S., Fragkoudi, F., Allende Prieto, C., Cunha, K., Hasselquist, S., et al.,
2021, *Monthly Notices of the Royal Astronomical Society*, 500, 1385
47. "Exploring the Stellar Age Distribution of the Milky Way Bulge Using APOGEE",
Hasselquist, S., Zasowski, G., Feuillet, D. K., Schultheis, M., Nataf, D. M., Anguiano, B., Beaton, R. L., Beers, T. C., Cohen, R. E., Cunha, K., et al.,
2020, *The Astrophysical Journal*, 901, 109
46. "The Milky Way's bulge star formation history as constrained from its bimodal chemical abundance distribution",
Lian, J., Zasowski, G., Hasselquist, S., Nataf, D. M., Thomas, D., Moni Bidin, C., Fernández-Trincado, J. G., Garcia-Hernandez, D. A., Lane, R. R., Majewski, S. R., et al.,
2020, *Monthly Notices of the Royal Astronomical Society*,
45. "The Magellanic Edges Survey I. Description and First Results",
Cullinane, L. R., Mackey, A. D., Da Costa, G. S., Koposov, S. E., Belokurov, V., Erkal, D., Koch, A., Kunder, A., & Nataf, D. M.,
2020, *Monthly Notices of the Royal Astronomical Society*,
44. "The Bulge Radial Velocity Assay for RR Lyrae Stars (BRAVA-RR) DR2: A Bimodal Bulge?",
Kunder, A., Pérez-Villegas, A., Rich, R. M., Ogata, J., Murari, E., Boren, E., Johnson, C. I., Nataf, D., Walker, A., Bono, G., et al.,
2020, *The Astronomical Journal*, 159, 270
43. "From the bulge to the outer disc: StarHorse stellar parameters, distances, and extinctions for stars in APOGEE DR16 and other spectroscopic surveys",
Queiroz, A. B. A., Anders, F., Chiappini, C., Khalatyan, A., Santiago, B. X., Steinmetz, M., Valentini, M., Miglio, A., Bossini, D., Barbuy, B., et al.,
2020, *Astronomy and Astrophysics*, 638, A76
42. "The chemical compositions of accreted and in situ galactic globular clusters according to SDSS/APOGEE",
Horta, D., Schiavon, R. P., Mackereth, J. T., Beers, T. C., Fernández-Trincado, J. G., Frinchaboy, P. M., García-Hernández, D. A., Geisler, D., Hasselquist, S., Jönsson, H., et al.,
2020, *Monthly Notices of the Royal Astronomical Society*, 493, 3363
41. "Homogeneous analysis of globular clusters from the APOGEE survey with the BACCHUS

code - II. The Southern clusters and overview",
Mészáros, S., Masseron, T., García-Hernández, D. A., Allende Prieto, C., Beers, T. C., Bizyaev, D., Chojnowski, D., Cohen, R. E., Cunha, K., Dell'Agli, F., et al.,
2020, *Monthly Notices of the Royal Astronomical Society*, 492, 1641

40. "Discovery of a nitrogen-enhanced mildly metal-poor binary system: Possible evidence for pollution from an extinct AGB star",
Fernández-Trincado, J. G., Mennickent, R., Cabezas, M., Zamora, O., Martell, S. L., Beers, T. C., Placco, V. M., Nataf, D. M., Mészáros, S., Minniti, D., et al.,
2019, *Astronomy and Astrophysics*, 631, A97
39. "The K2-HERMES Survey: Age and Metallicity of the Thick Disc",
Sharma, S., Stello, D., Bland-Hawthorn, J., Hayden, M. R., Zinn, J. C., Kallinger, T., Hon, M., Asplund, M., Buder, S., De Silva, G. M., et al.,
2019, *Monthly Notices of the Royal Astronomical Society*, 2471
38. "Strong evidence that the galactic bulge is shining in gamma rays",
Macias, O., Horiuchi, S., Kaplinghat, M., Gordon, C., Crocker, R. M., & Nataf, D. M.,
2019, *Journal of Cosmology and Astroparticle Physics*, 2019, 042
37. "HERBS II: Detailed chemical compositions of Galactic bulge stars",
Duong, L., Asplund, M., Nataf, D. M., Freeman, K. C., & Ness, M.,
2019, *Monthly Notices of the Royal Astronomical Society*, 486, 5349
36. "HERBS I: Metallicity and alpha enhancement along the Galactic bulge minor axis",
Duong, L., Asplund, M., Nataf, D. M., Freeman, K. C., Ness, M., & Howes, L. M.,
2019, *Monthly Notices of the Royal Astronomical Society*, 486, 3586
35. "Are the Double-mode Bulge RR Lyrae Stars with Identical Period Ratios the Relic of a Disrupted Stellar System?",
Kunder, A., Tilton, A., Maertens, D., Ogata, J., Nataf, D., Rich, R. M., Johnson, C. I., Gilligan, C., & Chaboyer, B.,
2019, *The Astrophysical Journal*, 877, L17
34. "The GALAH survey: An abundance, age, and kinematic inventory of the solar neighbourhood made with TGAS",
Buder, S., Lind, K., Ness, M. K., Asplund, M., Duong, L., Lin, J., Kos, J., Casagrande, L., Casey, A. R., Bland-Hawthorn, J., et al.,
2019, *Astronomy and Astrophysics*, 624, A19
33. "The GALAH survey: a catalogue of carbon-enhanced stars and CEMP candidates",
Čotar, K., Zwitter, T., Kos, J., Munari, U., Martell, S. L., Asplund, M., Bland-Hawthorn, J., Buder, S., de Silva, G. M., Freeman, K. C., et al.,
2019, *Monthly Notices of the Royal Astronomical Society*, 483, 3196
32. "The GALAH survey: co-orbiting stars and chemical tagging",
Simpson, J. D., Martell, S. L., Da Costa, G., Casey, A. R., Freeman, K. C., Horner, J., Ting, Y.-S., Nataf, D. M., Lewis, G. F., Ness, M. K., et al.,
2019, *Monthly Notices of the Royal Astronomical Society*, 482, 5302
31. "The GALAH survey: velocity fluctuations in the Milky Way using Red Clump giants",

Khanna, S., Sharma, S., Bland-Hawthorn, J., Hayden, M., Nataf, D. M., Ting, Y.-S., Kos, J., Martell, S., Zwitter, T., De Silva, G., et al.,
2019, *Monthly Notices of the Royal Astronomical Society*, 482, 4215

30. "The GALAH survey: verifying abundance trends in the open cluster M67 using non-LTE modelling",
Gao, X., Lind, K., Amarsi, A. M., Buder, S., Dotter, A., Nordlander, T., Asplund, M., Bland-Hawthorn, J., de Silva, G. M., D'Orazi, V., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 481, 2666
29. "The GALAH survey: accurate radial velocities and library of observed stellar template spectra",
Zwitter, T., Kos, J., Chiavassa, A., Buder, S., Traven, G., Čotar, K., Lin, J., Asplund, M., Bland-Hawthorn, J., Casey, A. R., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 481, 645
28. "Holistic spectroscopy: complete reconstruction of a wide-field, multiobject spectroscopic image using a photonic comb",
Kos, J., Bland-Hawthorn, J., Betters, C. H., Leon-Saval, S., Asplund, M., Buder, S., Casey, A. R., D'Orazi, V., de Silva, G., Freeman, K., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 480, 5475,
27. "The GALAH Survey: second data release",
Buder, S., Asplund, M., Duong, L., Kos, J., Lind, K., Ness, M. K., Sharma, S., Bland-Hawthorn, J., Casey, A. R., de Silva, G. M., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 478, 4513
26. "The GALAH survey: stellar streams and how stellar velocity distributions vary with Galactic longitude, hemisphere, and metallicity",
Quillen, A. C., De Silva, G., Sharma, S., Hayden, M., Freeman, K., Bland-Hawthorn, J., Žerjal, M., Asplund, M., Buder, S., D'Orazi, V., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 478, 228
25. "The GALAH survey: properties of the Galactic disc(s) in the solar neighbourhood",
Duong, L., Freeman, K. C., Asplund, M., Casagrande, L., Buder, S., Lind, K., Ness, M., Bland-Hawthorn, J., De Silva, G. M., D'Orazi, V., et al.,
2018, *Monthly Notices of the Royal Astronomical Society*, 476, 5216
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