

# KAREEM EL-BADRY

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## RESEARCH INTERESTS

binary stars, stellar-mass black holes, neutron stars, white dwarfs, wide-field surveys;  
near-field cosmology, galactic archaeology, globular clusters;  
galaxy formation, low-mass galaxies, stellar feedback

## EDUCATION

Ph.D., Astrophysics, University of California, Berkeley	2021
Thesis: <i>Binary stars across the Milky Way: Probes of star formation and evolution</i>	
M.A., Astrophysics, University of California, Berkeley	2018
B.S., Astronomy & Physics, <i>summa cum laude</i> , Yale University	2016

## RESEARCH POSITIONS

Assistant Professor, California Institute of Technology	2023–
Adjunct Scientist, MPA, Heidelberg	2023–
Junior Fellow, Harvard Society of Fellows	2021 – 2023
ITC Fellow, Harvard-Smithsonian Center for Astrophysics	2021 – 2023
Postdoctoral Fellow, recurring summer appointment, MPA, Heidelberg	2021 – 2023
Graduate Student, University of California, Berkeley	2016 – 2021
Kavli Summer Research Fellow, CCA, NYC	2018
Summer Visiting Researcher, MPA, Heidelberg	2017 – 2020
Summer Undergraduate Research Fellow, Caltech	2015
Undergraduate Research Assistant, Yale	2015 – 2016
Dean's Summer Research Fellow, Yale	2014

## HONORS & AWARDS

MacArthur Fellowship	2025
Alfred P. Sloan Research Fellowship	2025
New Horizons Solvay Lecturer in Physics	2025
IAU Ph.D. Prize, Stars and Stellar Physics division	2022
Mary Elizabeth Uhl Dissertation Prize, Berkeley	2021
Outstanding Graduate Student Instructor Award, Berkeley	2021
Robert J. Trumpler Graduate Student Excellence Award, Berkeley	2020
CCAPP Prize in Cosmology and AstroParticle Physics	2018
NSF Graduate Research Fellowship	2016 – 2021
Berkeley Fellowship	2016 – 2018
Hellman Award for Graduate Study	2016 – 2018
George Beckwith Prize in Astronomy, Yale	2016
Phi Beta Kappa, Yale	2015
Jerry Inskeep Memorial Scholarship, Yale	2014

## GRANTS

<b>HST General Observer Grant</b> , NASA/STScI, PI, Total: \$66,324	2026-2029
HST-GO-18120: <i>A COS Legacy Survey of Gaia DR3 WD+MS binaries</i>	
<b>Astronomy and Astrophysics Research Grant</b> , NSF, PI, Total: \$496,984	2025-2028
NSF-AST-2508988: <i>Hypervelocity survivors of thermonuclear supernovae: new models and new discoveries</i>	

<b>Sloan Fellowship</b> , physics, Alfred P. Sloan Foundation, PI, \$75,000	2025-2027
<b>Scialog Grant</b> , RCSA, CO-PI, \$66,000 to Caltech	2025-2027
SA-LSST-2024-114c: <i>IMBH in the LMC? A hypervelocity star survey with LSST</i>	
<b>Scialog Grant</b> , RCSA and Heising-Simons Foundation, CO-PI, \$66,000 to Caltech	2025-2027
SA-LSST-2024-084a: <i>White dwarf companions as brown dwarf chronometers</i>	
<b>JWST General Observer Grant</b> , NASA/STScI, PI, Total: \$79,486	2025-2027
JWST-GO-04979: <i>Uncovering the cold donors of AM CVn binaries</i>	
<b>HST General Observer Grant</b> , NASA/STScI, PI, Total: \$88,306	2024-2026
HST-GO-17441: <i>UV spectroscopy of runaways from thermonuclear supernovae</i>	
<b>Astronomy and Astrophysics Research Grant</b> , NSF, PI, Total: \$475,345	2023-2026
NSF-AST-2307232: <i>Dormant black holes and neutron stars in stellar binaries</i>	
<b>HST General Observer Grant</b> , NASA/STScI, PI, Total: \$30,000	2023-2025
HST-GO-17202: <i>Does MWC 656 host a black hole or a stripped helium star?</i>	
<b>HST General Observer Grant</b> , NASA/STScI, PI, Total: \$48,171	2023-2025
HST-GO-17200: <i>A census of massive binaries and LBVs in the Whirlpool Galaxy</i>	
<b>HST General Observer Grant</b> , NASA/STScI, CO-I, subaward: \$23,181	2023-2025
HST-GO-17216: <i>Establishing a 1% anchor for the Population II Distance Ladder with HST</i>	

## AWARDED TELESCOPE TIME (SUMMARY)

HST	19 orbits (PI) + 148 orbits (CO-I)
JWST	11 hours (PI) + 71 hours (CO-I)
Keck 10m	17.5 nights (PI) + 26 nights (CO-I)
Magellan 6.5m	9 nights (PI) + 4 nights (CO-I)
VLT 8.2m	46 hours (PI) + 40 hours (CO-I)
LBT 2 × 8.4m	3 nights (PI) + 3 nights (CO-I)
Gemini 8.1m	23 hours (PI)
Palomar Hale 200 inch	5 nights (PI) + 29 nights (CO-I)
MPG/ESO La Silla 2.2m	55 nights (PI) + 50 nights (CO-I)
Tillinghast 1.5m FLWO	30 nights (PI) + 10 nights (CO-I)
Las Cumbres Observatory 2×1 m	1.5 nights (PI)
Lick Shane 3m	26 nights (PI)
Lick APF 2.4m	15 nights (CO-I)
Nordic Optical Telescope 2.6m	12 nights (CO-I)
NTT 3.6m	3 nights (CO-I)
McDonald 2.7m Harlan J. Smith Telescope	5 nights (CO-I)
Very Large Array	4 hours (DDT; CO-I)
Green Bank Telescope	12 hours (CO-I)
MeerKAT	4 hours (DDT; CO-I)
Chandra	20ks (DDT; PI) + 20ks (DDT; CO-I)

## OBSERVING EXPERIENCE

Survey data – significant experience with data from Gaia, Kepler/K2, TESS, LAMOST, SDSS, ZTF	
Lick Shane telescope, KAST Spectrograph – 28 nights	2020-2021
Keck DEIMOS – 2.5 nights	2017
Keck ESI – 7 nights	2015, 2016, 2021-2023
Keck LRIS – 3 nights	2021-2023
Keck HIRES – 1 night	2022
Palomar Hale telescope, DBSP – 3 nights	2021-2023
Palomar Hale telescope, Wide-Field IR Camera – 1 night	2015
WIYN, Hydra Multi-Fiber Spectrograph – 2 nights	2014
Arecibo, L-Band HI – 2 nights	2013, 2014

## JOURNAL REFEREE

A&A, A&AL, ApJ, ApJL, MNRAS, MNRASL, SCPMA, Nature, Nature Astronomy, OJAp 39 papers; 2017 –

## COLLABORATION MEMBERSHIPS

*Euclid* Consortium (MW Spectroscopy working group) 2025 –  
*Gaia* Data Processing and Analysis Consortium (CU4: non-single stars) 2024 –  
*UVEX* mission (Low-mass, low-metallicity galaxies & the Magellanic Clouds) 2021 –  
Sloan Digital Sky Survey (binaries & compact objects working groups) 2021 –

## CONFERENCE ORGANIZING

Lead organizer of StellarBH25 (8-week KITP meeting on stellar-mass black holes), Santa Barbara 2025  
Co-chair of Keck science meeting, UCLA 2025  
SOC of Binary stars in the space era conference, Keele University 2025

## MENTORING

### El-Badry group at Caltech

Leo Betancourt-Chitnis (PhD student) 2025 –  
Maude Gull (Brinson Fellow) 2025 –  
Geoffrey Mo (Brinson Fellow) 2025 –  
Soumyadeep Bhattacharjee (PhD student) 2024 –  
Cheyanne Shariat (PhD student) 2024 –  
Lisa Blomberg (PhD student) 2023 –  
Natsuko Yamaguchi (PhD student) 2022 –  
Pranav Nagarajan (PhD student) 2022 –  
Antonio Rodriguez (PhD student) 2022 – 2025  
Domani Sharkey (SURF student) 2024 – 2025  
Evan Portnoi (SURF student) 2023 – 2024  
Umran Koca (Undergrad) 2023 – 2024

### Elsewhere

Ben Pennell (MPIA PhD student) 2024 –  
Johanna Müller-Horn (MPIA PhD student) 2023 –  
Casey Lam (Carnegie Observatories postdoc) 2023 –  
Rhys Seeburger (MPIA PhD student) 2021 – 2025  
Maude Gull (Berkeley PhD student) 2022 – 2025  
Jesse Han (Harvard PhD student) 2022 – 2023  
Vedant Chandra (Harvard PhD student) 2021 – 2023  
Silvia Almada (MPIA masters student) 2020 – 2022  
Pranav Nagarajan (Berkeley undergrad) 2020 – 2022  
Nick Choksi (Berkeley undergrad) 2018 – 2019

## TEACHING EXPERIENCE

Instructor, Ay 125, *High energy astrophysics*, Caltech WI2026  
Instructor, Ay 124, *Structure and Evolution of Galaxies*, Caltech WI2025  
Instructor, Ay 03, *Automating Discovery in the Universe*, Caltech SP2024  
Instructor, Ay 123, *Stellar Structure and Evolution*, Caltech WI2024, FA2024  
Graduate Student Instructor, Astro 128, *Astronomy Data Lab*, University of California, Berkeley 2019, 2020, 2021  
Course Designer, Astro 128, *Astronomy Data Lab*, University of California, Berkeley 2018, 2019, 2020  
Co-Instructor, Astro 375, *Graduate Pedagogy*, University of California, Berkeley 2019, 2020  
Sole Instructor, *Stellar Physics*, Hyeonpung High School, Daegu, South Korea 2019  
Graduate Student Instructor, Astro 160, *Stellar Physics*, University of California, Berkeley 2018  
Graduate Student Instructor, Astro 7A, *Introduction to Astronomy*, University of California, Berkeley 2017  
Graduate Student Instructor, Astro C12, *The Planets*, University of California, Berkeley 2017

## TALKS (SINCE 2017)

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Invited talk, MM2026 Yukawa International Seminar, YITP, Kyoto, Japan	2026
Review talk, StellarBH25, Kavli Institute for Theoretical Physics, Santa Barbara, CA	2025
Astronomy colloquium, Johns Hopkins University and STScI, Baltimore, MD	2025
Königstuhl colloquium, Max Planck Institute for Astronomy, Heidelberg, Germany	2025
Talk, Binary Stars in the Space Era conference, Keele, UK	2025
Astrophysics seminar, Royal Observatory of Belgium, Brussels, Belgium	2025
Astrophysics seminar, University of Liège, Liège, Belgium	2025
New Horizons Solvay Lectures in Physics, Université libre de Bruxelles, Brussels, Belgium	2025
KIPAC astrophysics colloquium, Stanford University, Palo Alto, CA	2025
CfA colloquium, Center for Astrophysics   Harvard & Smithsonian, Cambridge, MA	2025
Astronomy colloquium, Columbia University, New York City, NY	2025
Talk, 10 years to LISA meeting, Jet Propulsion Laboratory, Pasadena, CA	2025
Astrophysics colloquium, Princeton University, Princeton, NJ	2025
Astrophysics seminar, Carnegie Mellon University, Pittsburgh, PA	2025
Astronomy colloquium, Indiana University, Bloomington, IN	2025
Astronomy colloquium, University of Texas, Austin, TX	2024
Review talk, Multimessenger binary mergers meeting, Aspen, CO	2024
Review talk, Lorentz center workshop on stripped stars, Leiden, Netherlands	2024
Talk, EUROWD24, Barcelona, Spain	2024
Talk, SDSS-V collaboration meeting, Las Cruces, NM	2024
Astronomy colloquium, University of Washington, Seattle, WA	2024
Talk, 20 Years of the ITC conference, Cambridge, MA	2024
IAS Astrophysics Seminar, Princeton, NJ	2024
Caltech Astronomy Colloquium, Pasadena, CA	2024
UCSC Astronomy Colloquium, Santa Cruz, CA	2023
Sydney Institute for Astronomy seminar, Sydney, AU	2023
Astrophysics colloquium, Carnegie Observatories, Pasadena, CA	2023
Review talk, Massive Triples, Binaries and Mergers, Leuven, Belgium	2023
Review talk, Lorentz center workshop on stellar black holes, Leiden, Netherlands	2023
Astrophysical sciences division colloquium, NASA/Goddard	2023
Astrophysics colloquium, Boston University	2023
Astrophysics colloquium, Cornell University	2023
Astrophysics colloquium, University of Pennsylvania	2023
Astrophysics colloquium, University of Michigan	2022
Talk, KITP white dwarf conference, Santa Barbara, CA	2022
Astrophysics colloquium, Dunlap Institute, University of Toronto	2022
Astrophysics colloquium, Yale University	2022
Talk, ZTF theory network meeting, CA	2022
Talk, EUROWD22, Tübingen, Germany	2022
Galaxy coffee, Max Planck Institute for Astronomy, Heidelberg, Germany	2022
Astrophysics colloquium, Shanghai Astronomical Observatory	2022
Astrophysics colloquium, University of California, Los Angeles	2022
IAU working group on active B stars seminar	2022
Albert Einstein Institute seminar, Potsdam, Germany	2022
UCSD/SDSU joint colloquium, San Diego	2021
Harvard Society of Fellows lunch talk, Harvard University	2021
Stellar Astrophysics Center seminar, Aarhus University, Aarhus, Denmark	2021
Astrophysics colloquium, Massachusetts Institute of Technology	2021
Institute of Theory and Computation colloquium, Harvard University	2021
Königstuhl colloquium, Max Planck Institute for Astronomy, Heidelberg, Germany	2021
Astrophysics colloquium, CIERA center, Northwestern University	2021
Astronomy seminar, University of Warwick, UK	2021
Lunch talk, University of California, Berkeley	2021
Astronomy colloquium, University of California, Berkeley	2021

Astronomy colloquium, California Institute of Technology	2021
Astronomy colloquium, University of Chicago	2021
Physics colloquium, University of Utah	2021
Lunch talk, University of California, Berkeley	2020
Tea talk, California Institute of Technology	2020
CIERA seminar, Northwestern University	2020
Summer astrophysics colloquium, Princeton University	2020
Galaxy coffee, Max Planck Institute for Astronomy, Heidelberg, Germany	2020
Lunch talk, University of California, Berkeley	2020
Astronomy seminar, Center for Computational Astrophysics, NYC	2020
Talk, ZTF theory meeting	2020
Astronomy seminar, University of Chicago	2019
Tea talk, Kavli Institute for Particle Astrophysics and Cosmology, Stanford University	2019
Lunch talk, University of California, Berkeley	2019
Astronomy seminar, Boston University	2019
Galaxies and cosmology seminar, Center for Astrophysics, Harvard University	2019
Tea talk, California Institute of Technology	2019
Invited talk, The Milky Way 2019: LAMOST and other Leading Survey meeting, Yichang, China	2019
Astronomy seminar, Charles University, Prague, Czech Republic	2019
Contributed talk, Universe of Binaries meeting, Telč, Czech Republic	2019
Contributed talk, CosmoDwarfs meeting, Durham, UK	2019
Galaxy coffee, Max Planck Institute for Astronomy, Heidelberg, Germany	2019
Lunch talk, University of California, Berkeley	2019
FLASH seminar, UC Santa Cruz	2019
Cosmology seminar, UC Davis	2019
Invited talk, Lorentz Center workshop on globular clusters, Leiden, Netherlands	2019
Invited talk, Near/Far workshop, Napa, CA	2018
Lunch talk, University of California, Berkeley	2018
Grad student+postdoc seminar, University of California, Berkeley	2018
CCAPP Prize Prize colloquium, Ohio State University	2018
Invited talk, Galactic angular momentum focus group, IAU, Vienna, Austria	2018
Contributed talk, Kavli Summer Program in Astrophysics, Center for Computational Astrophysics, NYC	2018
Lunch talk, Center for Computational Astrophysics, NYC	2018
Galaxy coffee, Max Planck Institute for Astronomy, Heidelberg, Germany	2018
Galaxy lunch, Yale University	2018
Grad student+postdoc seminar, University of California, Berkeley	2018
Lunch talk, University of California, Berkeley	2018
Invited talk, Near/Far workshop, Napa, CA	2017
Lunch talk, University of California, Berkeley	2017
SFB seminar, ARI, Heidelberg, Germany	2017
Galaxy coffee, Max Planck Institute for Astronomy, Heidelberg, Germany	2017
Contributed poster, Galaxy-Halo Connection Workshop, KITP	2017
Grad student+postdoc seminar, University of California, Berkeley	2017
Lunch talk, University of California, Berkeley	2017
GalForm seminar, University of California, Berkeley	2017

## REFEREED PUBLICATIONS (185 TOTAL; 39 FIRST-AUTHOR)

h-index: 52 (all papers), 30 (first-author papers)

citations: 8300+ (all papers), 3300+ (first-author papers)

\*: student papers for which I was the primary advisor

185. \* Nagarajan, P., **El-Badry, K.**, Bobrick, A., Iorio, G., Molina, F., Vos, J., and Vučković, M., 2026, “Testing models for fully and partially stripped low-mass stars with *Gaia*: Implications for hot subdwarfs, binary RR Lyrae, and black hole impostors”, arXiv:2602.21289, PASP, submitted.
184. Householder, A., Shin, K., Burdge, K. B., Marsh, T. R., Rappaport, S. A., **El-Badry, K.**, Chakraborty, J., Chickles, E., Dai, F., Graham, M. J., Kulkarni, S. R., Rodriguez-Gil, P., Vanderburg, A., and Whitebook, S., 2026, “Stars stably accreting from substellar objects”, Science, submitted.

183. \* Nagarajan, P., **El-Badry, K.**, Maccarone, T. J., Iorio, G., Rastello, S., and Müller-Horn, J., 2026, “BE Lyncis is not a Black Hole Binary: Lessons From *Gaia* and *Hipparcos* Astrometry”, arXiv:2601.22071, PASP, submitted.
182. \* Müller-Horn, J., Ramachandran, V., **El-Badry, K.**, Sander, A. A. C., Bodensteiner, J., Gies, D. R., Götberg, Y., Rivinius, T., Shenar, T., Schösser, E. C., Wang, L., Bieryla, A., Buchhave, L. A., and Latham, D. W., 2026, “Ultraviolet spectroscopy reveals a hot and luminous companion to the Be star + black hole candidate MWC 656”, arXiv:2601.14403, A&A, in press.
181. Chickles, E. T., Chakraborty, J., Burdge, K. B., Dhillon, V. S., Draghis, P., **El-Badry, K.**, Green, M. J., Householder, A., Hughes, S., Layden, C., Littlefair, S. P., Munday, J., Pelisoli, I., Redden, M. S., Tonry, J., van Roestel, J., Angile, F. E., Brown, A. J., Castro, N., Dinsmore, J., Dyer, M., Furesz, G., Gabutti, M., Garbutt, J., Jarvis, D., Kennedy, M. R., Kerry, P., McCormac, J., Mo, G., Osip, D., Parsons, S., Pike, E., Piotrowski, J., Romani, R. W., Sahman, D., and Simcoe, R., 2026, “An eclipsing 8.56 minute orbital period mass-transferring binary”, arXiv:2601.07925, ApJ, submitted.
180. **El-Badry, K.**, Rodriguez, A. C., Green, M. J., Burdge, K. B., 2026, “JWST observations of three long-period AM CVn binaries: detection of the donors and hints of magnetically truncated disks”, arXiv:2601.00945, OJAp, in press.
179. \* Shariat, C. and **El-Badry, K.** “A global view of post-interaction white dwarf-main sequence binaries”, arXiv:2601.00439, PASP, in press.
178. \* Yamaguchi, N., **El-Badry, K.**, Reggiani, H., Andrae, R., Shahaf, S., 2025, “Chemical signatures of AGB mass transfer in Gaia white dwarf companions”, arXiv:2512.07972, PASP, in press.
177. Elms, A. K., Bagnulo, S., Tremblay, P.-E., Cunningham, T., Munday, J., Landstreet, J., **El-Badry, K.**, Caiazzo, I., Melis, C., 2025, “Detection of a weak magnetic field in the Balmer emission line white dwarf WD J1653–1001”, MNRAS, submitted.
176. \* Blomberg, L., **El-Badry, K.**, Ludwig, B., Drout, M. R., Götberg, Y., 2025, “Intermediate-mass stripped stars in the Magellanic Clouds: forward modeling the observed population discovered via UV excess”, PASP, in press.
175. Lam, C. Y., Simon, J. D., **El-Badry, K.**, Isaacson, H., Kelson, D. D., Lu, J., 2025, “A search for black holes with metal-poor stellar companions: I. Survey sample selection and single epoch radial velocity follow-up”, arXiv:2510.17746, ApJ, submitted
174. Chattopadhyay, D., Rocha, K. A., Gossage, S., Kalogera, V., **El-Badry, K.**, Tchekhovskoy, A., 2025, “Modelling the future of Gaia neutron star-main sequence binaries: from eccentric orbits to millisecond pulsar-white dwarfs”, arXiv:2510.16201, ApJ, submitted.
173. \* Shariat, C., **El-Badry, K.**, Bhattacharjee, S., 2025, “How precisely can we measure the ages of subgiant and giant stars?”, arXiv:2510.08675, PASP, submitted.
172. Müller-Horn, J., Rix, H.-W., **El-Badry, K.**, Pennell, B., Green, M., Li, J., Seeburger, R., 2025, “Dormant BH candidates from Gaia DR3 summary diagnostics”, arXiv:2510.05982, A&A, submitted.
171. Crumpler, N. R., Zakamska, N. L., Pallathadka, G. A., **El-Badry, K.**, 2025, “Searching for ultra-light dark matter in spatial correlations of white dwarf structure”, arXiv:2510.00271, ApJ, 997, 293.
170. **El-Badry, K.**, Hogg, D. W., Rix, H.-W., 2025, “Active galactic nuclei do not exhibit strictly sinusoidal brightness variations”, arXiv:2509.10601, PASP, in press.
169. \* Shariat, C., **El-Badry, K.**, Gennaro, M., Ding, K., Simon, J. D., Avila, R. J., Calamida, A., Cassisi, S., Correnti, M., Weisz, D. R., Geha, M., Kirby, E. N., Brown, T. M., Ricotti, M., McQuinn, K. B. W., Kallivayalil, N., Gilbert, K., Pacifici, C., Guhathakurta, P., Crnojević, D., Boyer, M. L., Beaton, R. L., Chandra, V., Cohen, R. E., Renzini, A., Savino, A., Tollerud, E. J., 2025, “Wide binaries in an ultra-faint dwarf galaxy: discovery, population modeling, and a nail in the coffin of primordial black hole dark matter”, arXiv:2509.04555, PASP, 137, 104103.
168. Desai, A., Caiazzo, I., Vennes, S., Kawka, A., Cunningham, T., Kotwale, G., Cristea, A. A., Raymond, J. C., Camisassa, M., Althaus, L. G., Hermes, J. J., Traulsen, I., Fuller, J., Heyl, J., van Roestel, J., Burdge, K. B., Rodriguez, A. C., Pelisoli, I., Gänsicke, B. T., Szkody, P., Maheshwari, S. K., Vanderbosch, Z. P., Drake, A., Ferrario, L., Wickramasinghe, D., Justham, S., Pakmor, R., **El-Badry, K.**, Prince, T., Kulkarni, S. R., Graham, M. J., Rusholme, B., Laher, R. R., Purdum, J., 2025, “Magnetic atmospheres and circumstellar interaction in

- J1901+1458: Revisiting the most compact white dwarf merger remnant in the light of new UV and X-ray data: A new class of white dwarf merger remnants with X-ray emission”, arXiv:2509.03216, A&A, submitted.
167. Pallathadka, G. A., Chandra, V., Zakamska, N. L., Crumpler, N. R., Arseneau, S. M., **El-Badry, K.**, Gänsicke, B. T., Zenati, Y., Hermes, J. J., Schwöpe, A. D., Badenes, C., Gentile Fusillo, N. P., Morrison, S., Cunningham, T., Chakraborty, P., Tovmassian, G., Bizyaev, D., Pan, K., Anderson, S. F., Demasi, S., 2025, “Double white dwarf binaries in SDSS-V DR19: A catalog of DA white dwarf binaries and constraints on the binary population”, arXiv:2509.02906, ApJ, submitted.
  166. Galiullin, I., Rodriguez, A. C., **El-Badry, K.**, Caiazzo, I., Szkody, P., Nagarajan, P., Whitebook, S., 2025, “Optical spectroscopy of the most compact accreting binary harboring a magnetic white dwarf and a hydrogen-rich donor”, arXiv:2508.20170, ApJL, 990, 57
  165. Wetzel, A., Samuel, J., Gandhi, P. J., Ponnada, S. B., Su, K.-Y., Arora, A., Angles-Alcazar, D., Hayward, C. C., Sanderson, R. E., Feldmann, R., Cochrane, R., Nikakhtar, F., Panithanpaisal, N., Benavides, J. A., Pandya, V., Grudic, M., Hummels, C., Gurvich, A. B., Hafen, Z., Ma, X., Garrison-Kimmel, S., Sameie, O., Chan, T. K., **El-Badry, K.**, Necib, L., Loebman, S., Wellons, S., Robles, V. H., Wheeler, C., Moreno, J., Stern, J., Boylan-Kolchin, M., Bullock, J. S., Faucher-Giguère, C.-A., Kereš, D., Quataert, E., Hopkins, P. F., 2025, “Second public data release of the FIRE-2 cosmological zoom-in simulations of galaxy formation”, arXiv:2508.06608, ApJ, submitted.
  164. Gao, S.-J., Li, X.-D., Wang, S., **El-Badry, K.**, Zhou, D.-J., Shao, Y.-X., Yan, Z., Wang, P., Zhou, P., Han, J.-L., 2025, “Search for radio pulsations from neutron star candidates in detached binaries”, arXiv:2511.20242, ApJ, 997, 222.
  163. \* Yamaguchi, N., **El-Badry, K.**, Wong, T. L. S., Shen, K. J., 2025, “Carbon burning cannot explain puffy hypervelocity white dwarfs”, arXiv:2507.15952, PASP, 137, 104103.
  162. Cristea, A. A., Caiazzo I., Cunningham, T., Raymond, J. C., Vennes, S., Kawka A., Desai, A., Miller, D. R., Hermes, J. J., Fuller J., Heyl J., van Roestel, J., Burdge, K. B., Rodriguez, A. C., Pelisoli, I., Gänsicke, B. T., Szkody, P., Kenyon, S. J., Vanderbosch, Z., Drake, A., Ferrario L., Wickramasinghe, D., Karambelkar, V. R., Justham, S., Pakmor, R., **El-Badry, K.**, Prince, T., Kulkarni, S. R., Graham, M. J., Masci, F. J., Groom, S. L., Purdum, J., Dekany, R., Bellm, E. C., 2025, “A half-ring of ionized circumstellar material trapped in the magnetosphere of a white dwarf merger remnant”, arXiv:2507.13850, A&A, submitted.
  161. **El-Badry, K.**, Fabry, M., Sana, H., Shenar, T., Seeburger, R., 2025, “Complex spectral variability and hints of a luminous companion in the Be star + black hole binary candidate ALS 8814”, arXiv:2509.01545, OJAp, 8, 128.
  160. \* Nagarajan, P., **El-Badry, K.**, Reggiani, H., Lam, C. L., Simon, J. D., Müller-Horn, J., Seeburger, R., Rix, H.-W., Isaacson, H., Lu, J., Chandra, V., Andrae, R., 2025, “A spectroscopic search for dormant black holes in low-metallicity binaries”, arXiv:2507.12532, PASP, 137, 4202.
  159. Pallathadka, G. A., Chandra, V., Gänsicke, B. T., Zakamska, N. L., Koester, D., Zenati, Y., Crumpler, N. R., Arseneau, S. M., Hermes, J. J., Schreiber, M. R., Stassun, K. G., Schwöpe, A., **El-Badry, K.**, Tovmassian, G., Cunningham, T., Morrison, S., 2025, “Double white dwarf binaries in SDSS-V DR19: The discovery of a rare DA+DQ white dwarf binary with 31 hour orbital period”, arXiv:2507.11618, ApJ, in press.
  158. Li, J., Rix, H.-W., Ting, Y.-S., Müller-Horn, J., **El-Badry, K.**, Liu, C., Seeburger, R., Green, G. M., Zhang, X., 2025, “Millions of main-sequence binary stars from Gaia BP/RP spectra”, arXiv:2507.09622, A&A, submitted.
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