

Curriculum Vitae

Contact Information

Address: Louisiana State University,
Department of Physics and Astronomy,
202 Nicholson Hall, Tower Drive,
Baton Rouge, LA 70803-4001
Tel: (225) 578-7459
Fax: (225) 578-5855
E-mail: rhynes@lsu.edu
Web: <https://roberthynes.github.io/>

Personal

Citizen of the United Kingdom
Permanent Resident of the United States

Education

1999 Ph.D., The Open University, UK (First 2.5 years at the University of Sussex, United Kingdom)
Title: *Observations of Low Mass X-ray Transients in Outburst*
Supervisor: Dr. C. A. Haswell
1996 M.Sc. with Distinction, Astronomy, University of Sussex, United Kingdom
Title: *Synthetic Spectra of OB-Type Binary Stars: A Tool to Test the Disentangling Technique*
Supervisor: Dr. P. F. L. Maxted
1993 Post Graduate Certificate in Education, University of Oxford, United Kingdom
Specialization in Science teaching, age 11-18
1992 B.A. (Hons.), 1st Class, Physics, University of Oxford, United Kingdom
Optional Specializations in Atomic, Nuclear and Theoretical Physics

Professional Experience

2015 – Professor, Louisiana State University
2010 – 2015 Associate Professor, Louisiana State University
2004 – 2010 Assistant Professor, Louisiana State University
2002 – 2004 Hubble Fellow, The University of Texas at Austin
1999 – 2002 Leverhulme Trust Research Fellow, The University of Southampton, United Kingdom
1993 – 1995 Teacher of Science, Oxted County School, Surrey, United Kingdom

Awards

2018 Louisiana State University Alumni Association Faculty Excellence Award
2018 Louisiana State University Tiger Athletic Foundation College Undergraduate Teaching Award
2010 Louisiana State University, College of Basic Sciences Faculty Research Award
2002 Hubble Postdoctoral Fellowship
2000 Joint second place for Michael Penston Astronomy Prize (Royal Astronomical Society Ph.D. thesis competition)

Professional Memberships

International Astronomical Union
American Astronomical Society & High Energy Astrophysics Division
American Association of Variable Star Observers

Professional Service

2024	Chair of IXPE Peer Review Panel for NASA
2023 – present	Member of LSST Transients and Variable Stars Scientific Collaboration
2022 – present	Member of NASA/Strobe-X science working group
2022	Member of a NuSTAR Peer Review Panel for NASA
2021	Deputy Chair of a NuSTAR Peer Review Panel for NASA
2020	Member of NSF Astronomy and Astrophysics Grant Review Panel
2019 – 2022	Member of the Gemini Observatory Science and Technology Advisory Committee
2018	External reviewer for SWO (Netherlands) and the Montana EPSCoR program
2017 – 2018	Member of Local Organizing Committee IAU Symposium 338: Gravitational Wave Astrophysics: Early Results from GW Searches and Electromagnetic Counterparts
2016 – 2018	Chair of a panel for the Telescope Allocation Committee, National Optical Astronomy Observatories
2015	Member of a Chandra X-ray Observatory Peer Review Panel for NASA
2014	Deputy-chair of a Suzaku X-ray Observatory Peer Review Panel for NASA
2012	External reviewer for ANR (France) and SWO (Netherlands)
2011	Chair of a Chandra X-ray Observatory Peer Review Panel for NASA
2011	Reviewer for an NSF Astronomy and Astrophysics Grant proposal
2010	Member of Peer Review Panel for NSF Postdoctoral Fellowships
2008	Chair of a Chandra X-ray Observatory Peer Review Panel for NASA
2007	Member of a Rossi X-ray Observatory Peer Review Panel for NASA Member of organizing committee for “A Population Explosion” conference
2006	Member of a Suzaku X-ray Observatory Peer Review Panel for NASA Co-chair of Scientific Organizing Committee for 1 st meeting of the 3 rd Coast Astronomical Society
2005	Member of a Chandra X-ray Observatory Peer Review Panel for NASA
2003 – 2004	Member of the McDonald Observatory User Committee
2003 – 2004	Member of the Telescope Allocation Committee, National Optical Astronomy Observatories
2000 – present	Referee for Nature, Astrophysical Journal and Letters, Astronomical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy and Astrophysics, Advances in Space Research

Departmental and University Service

2023 – present	Chair of mentoring committee for Natalie Hinkel
2022 – present	Member of mentoring committee for Matthew Penny
2020 – 2021	Member of Graduate Faculty Committee for Graduate School Strategic Planning exercise and of the Graduate Retention Sub-committee
2020 – 2024	Chair of mentoring committee for Eric Burns
2019 – 2020	Member, High-Energy Astrophysics Faculty Search Committee
2018 – present	Co-director of Physics and Astronomy NSF REU program
2018	Member, Astrophysics Faculty Search Committee
2016 – 2022	Member of mentoring committee for Manos Chatzopoulos
2016 – 2023	Physics and Astronomy Graduate Advisor
2016 – 2017	Member, Departmental Steering Committee
2015 – 2021	Member of mentoring committee for Rui Zhang
2015 – 2016	Member, Astrophysics Faculty Search Committee
2015 – 2016	Secretary, Departmental Steering Committee
2013 – 2014	Chair, Departmental Steering Committee
2013	Member, Departmental Chair Search Committee
2013 – 2014	Member, Instructor Search Committee
2012 – 2013	Member, Departmental Steering Committee
2012 – 2016	Member, Departmental Newsletter Committee
2011 – 2016	Member, Department of Physics and Astronomy Undergraduate Recruiting Committee
2011	Member, Department of Physics and Astronomy Space Committee
2007 – 2011	Chair, Department of Physics and Astronomy Undergraduate Recruiting Committee
2005 – 2007	Member, Department of Physics and Astronomy Undergraduate Recruiting Committee

Postdoctoral Scholars and Graduate Students

2004 – 2007	Kevin Pearson (Senior Postdoctoral Researcher; now Research Officer, Swansea University, UK)
2009 – 2011	Valerie Mikles (Postdoctoral Researcher; now Physical Scientist, National Oceanic and Atmospheric Administration, MD)
2005 – 2009	Charles Bradley (PhD; now Models and Simulation Scientist at Torch Technologies, Inc., AL)
2008 – 2013	Christopher Britt (PhD; now Public Outreach Scientist, Space Telescope Science Institute, MD)
2012 – 2016	Christopher Johnson (PhD; now Associate-Senior Data Scientist/Developer at Booz Allen Hamilton, MD)
2015 – 2021	Joshua Wetuski (PhD; now Operations Research Analyst at Redstone Arsenal, AL)
2019 – 2023	Alexander Igl (PhD; now at White Sands Missile Range, NM)
2022 –	Eric Borowski (Graduate student)

Colloquia and Invited Talks

2024 July	Solicited Review at the 45 th COSPAR Scientific Assembly, Busan, Korea: “Rapid optical and infrared observations of black hole X-ray binaries in a multiwavelength context”
2021 June	International Physics Webinar, Pabna University of Science and Technology, Bangladesh, “Outbursts of Galactic Black Holes”
2016 May	Colloquium at the Gemini-South Observatory, Cerro Tololo, Chile, “The Galactic Bulge Survey”
2012 Oct	Research Seminar at the University of Texas at San Antonio, “Prospecting the Bulge of our Galaxy for Black Holes and Neutron Stars”
2011 Apr	Colloquium at the University of Alabama: “Black Holes and Neutron Stars in Binary Systems”
2009 Nov	Invited 5 hour lecture series at the 2009 Instituto de Astrofisica de Canarias Winter School, Tenerife, Spain: “Accretion in Neutron Star and Black Hole Binary Systems”
2009 Apr	Colloquium at University of Florida: “The Search for Galactic Black Holes and Neutron Stars”
2008 Jul	Invited Review at the 37 th COSPAR Scientific Assembly, Montreal, Canada: “Multiwavelength Observations of Neutron Star Transients”
2007 Sep	Invited Review at “High Time-Resolution Astrophysics”, Edinburgh, UK: “High Time Resolution Optical and IR Observations of X-ray Binaries”
2005 Dec	Invited Review at “The Transient Milky Way: A Perspective for MIRAX”, Sao Jose dos Campos, Brazil: “A Multiwavelength Perspective on Variability in Galactic Black Holes”
2005 Jun	Colloquium at the University of Southampton, UK: “A Multiwavelength View of Galactic Black Holes”
2005 Jun	Colloquium at The Open University, UK: “A Multiwavelength View of Galactic Black Holes”
2004 Jul	Invited Review at “The Astrophysics of Cataclysmic Variables and Related Objects”, Strasbourg, France: “Correlated X-ray and Optical Variability in X-ray Binaries”

Courses Taught

ASTR 1102	Introduction to Stellar Astronomy, Fall 2004, Fall 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Fall 2010, Spring 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2017, Summer 2018, Fall 2019, Fall 2021, Fall 2024, Fall 2025
PHYS 2110	Particle Mechanics, Summer 2014
ASTR 4221	Stellar Astrophysics, Fall 2016, Fall 2018, Fall 2020, Fall 2022
ASTR 4222	Galactic Astrophysics, Spring 2011, Spring 2013, Spring 2015, Spring 2017, Spring 2019, Spring 2021, Spring 2023, Spring 2025
ASTR 4261	Modern Observational Techniques, Fall 2005, Fall 2007, Fall 2009
PHYS 4991	Special Problems in Physics, Fall 2016, Spring 2018
ASTR 7742	Stellar Astrophysics II, Spring 2014, Spring 2016, Spring 2018, Spring 2020, Spring 2022, Spring 2024
ASTR 7783	Special Topics in Astronomy and Astrophysics, Spring 2006, Fall 2008, Fall 2012

Funding

2023 – 2026	Testing the Jet Origin of the Mysterious Infrared Excess in Quiescent Black Hole Binaries Space Telescope Science Institute (PI) \$101,825
2023 – 2026	Black Hole Jet Launching Physics with MIRI Space Telescope Science Institute (Co-I) \$57,110
2023 – 2024	Multiwavelength Studies of Black Hole Binaries in Quiescence NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$10,000
2022 – 2023	The Effects of X-rays on the Optical Signal in X-ray Binaries NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$8,000
2022 – 2025	REU site: Research in Physics & Astronomy at Louisiana State University National Science Foundation (PI) \$340,863
2020 – 2024	X-ray Selected Symbiotics in the Galactic Bulge NASA Chandra X-ray Observatory Archival Program (PI) \$58,000
2019 – 2023	REU site: Research in Physics & Astronomy at Louisiana State University National Science Foundation (PI) \$343,863
2018 – 2021	Ultraviolet Spectroscopy of the Black Hole Transient MAXI J1820+070 Space Telescope Science Institute Guest Observer Program (Co-I) \$9,949
2015– 2018	Longer and Sharper, Deeper and Wider: Leveraging the Chandra Archive to Maximize the Yield of the Galactic Bulge Survey NASA Chandra X-ray Observatory Archival Program (PI) \$64,465
2015 – 2018	Confirmation of the Symbiotic Nature of CXOGBS J173620.2-293338 NASA Chandra X-ray Observatory Guest Observer Program (PI) \$37,999
2015 – 2016	A Search for Historical Outbursts from Galactic Bulge Survey X-ray Binaries NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$5,000
2013 – 2016	Classifying X-ray Sources from the Chandra Galactic Bulge Survey NASA Chandra X-ray Observatory Archival Program (PI) \$58,459
2013 – 2014	Identifying and Characterizing Black Hole and Neutron Star Binaries Among Faint X-ray Sources in the Galactic Bulge NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$5,000
2012 – 2013	Classifying X-ray Sources from the Galactic Bulge Survey NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$5,000
2011 – 2013	Completing the Galactic Bulge Survey: Categorizing the Plethora of Faint X-ray Sources in the Galactic Bulge NASA Chandra X-ray Observatory GO Program (PI) \$9,897
2009 – 2014	Black Hole and Neutron Star Binaries in the Galactic Bulge Survey National Science Foundation Astronomy and Astrophysics Grants (PI) \$268,795
2007 – 2011	Multiwavelength and Multimessenger Observations in Conjunction with the GLAST Satellite Mission NASA/BoR EPSCOR Program (Co-PI) \$1,434,000

2007 – 2009	Reflection Echo Tomography of Black Hole and Neutron Star Binaries NASA/BoR LaSpace Research Initiation Award (PI) \$27,464
2007 – 2008	Optical Observations of the Faintest Accreting Black Holes in the Galaxy Office of Research Faculty Research Grant (PI) \$9,930
2006 – 2009	Echo Tomography of Cygnus X-2 NASA RXTE GO Program (PI) \$20,561
2006 – 2009	X-ray Observations of V404 Cyg NASA/BoR LaSpace Graduate Student Research Assistance (PI) \$12,000
2006 – 2008	High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371 NASA/STScI HST GO Program (PI) \$9,990
2005 – 2008	The Accretion Rate of Recurrent Novae NASA Galex GO Program (Co-I) \$40,000
2005 – 2007	Echo-Mapping a Quiescent Black Hole NASA XMM-Newton GO Program (PI) \$45,800
2005 – 2006	Probing the Accretion Geometry of a Quiescent Black Hole NASA Chandra X-ray Observatory GO Program (PI) \$9,458
2005	What Does Flickering in Quiescent Black Holes Tell Us? Office of Research Summer Stipend (PI) \$5,000
2004 – 2007	A UV Survey of Quiescent Black Holes and Neutron Stars NASA/STScI HST GO Program (PI) \$62,883

Publications

Refereed Journal Papers

1. *Orbital parameter estimation from X-ray/optical echo mapping in X-ray binaries*, Sutter, T.M., Clarkson, W.I., Nelson, E.C., **Hynes, R.I.**, 2025, The Astrophysical Journal, submitted
2. *Optical Counterparts to X-ray sources in LSST DPL*, Yuankun, Wang, Bellm, E.C., **Hynes, R.I.**, Zhao, Y., Gandhi, P., Rivera Sandoval, L., Campos, S., Caplar, N., DeLucchi, M., Malanchev, K., Wainer, T.M., 2025, The Astrophysical Journal, submitted, arXiv:2507.14400
3. *The Jet Origin of the Mid-infrared Excess in the Black Hole V404 Cygni in Quiescence*, Borowski, E.S., **Hynes, R.I.**, Hunt, Q., Tetarenko, A.J., Plotkin, R.M., Shahbaz, T., Gandhi, P., Maccarone, T.J., Miller-Jones, J.C.A., Heinke, C.O., Shaw, A.W., Russell, T.D., Sivakoff, G.R., Charles, P.A., Palaiologou, E.V., Reig, P., 2025, The Astrophysical Journal, submitted, arXiv:2506.20536
4. *Multidisciplinary Science in the Multimessenger Era*, Burns, E., Fryer, C.L., Agullo, I., Andrews, J., Aydi, E., Baring, M.G., Baron, E., Boorman, P.G., Boroumand, M.A., Borowski, E., Broekgaarden, F.S., Chandra, P., Chatzopoulos, E., Chen, H.-Y., Chipps, K.A., Civano, F., Comisso, L., Cárdenas-Avendaño, A., Dang, P., Deibel, C.M., Eftekhari, T., Elliott, C., Foley, R.J., Fontes, C.J., Gall, A., Galleher, G.R., Gonzalez, G., Guo, F., Babiuc Hamilton, M.C., Harding, J.P., Henning, J., Herwig, F., Hix, W.R., Ho, A.Y.Q., Holley-Bockelmann, K., Hounsell, R., Hui, C.M., Humensky, T.B., Hungerford, A., **Hynes, R.I.**, Jin, W., Johns, H., Gatu Johnson, M., Kennea, J.A., Kuranz, C., Lamb, G.P., Launey, K.D., Lewis, T.R., Liidakis, I., Livescu, D., Loch, S., MacDonald, N.R., Maccarone, T., Marcotulli, L., Meli, A., Messer, B., Miller, M.C., Milton, V., Most, E.R., Mumma, D.C., Mumpower, M.R., Negro, M., Neights, E., Nugent, P., Pasham, D.R., Radice, D., Rani, B., Read, J.S., Reifarh, R., Reily, E., Rhodes, L., Richard, A., Ricker, P.M., Roberts, C.J., Schatz, H., Shawhan, P., Takacs, E., Tomsick, J.A., Trigg, A.C., Urbatsch, T., Vassh, N., Villar, V.A., Wadiasingh, Z., Waratkar, G., Zingale, M., 2025, arXiv:2502.03577
5. *Ultraviolet spectroscopy of the black hole X-ray binary MAXI J1820+070 across a state transition*, Georganti, M., Knigge, C., Castro Segura, N., Long, K.S., Dewangan, G.C., Banerjee, S., **Hynes, R.I.**, Gandhi, P., Altamirano, D., Patterson, J., Zurek, D.R., 2025, MNRAS, in press, arXiv:2501.17935
6. *Rapid mid-infrared spectral timing with JWST: GRS 1915+105 during an MIR-bright and X-ray-obscured state*, Gandhi, P., Borowski, E.S., Byrom, J., **Hynes, R.I.**, Maccarone, T.J., Shaw, A.W., Adegoke, O.K., Altamirano, D., Baglio, M.C., Bhargava, Y., Britt, C.T., Buckley, D.A.H., Buisson, D.J.K., Casella, P., Segura, N.C., Charles, P.A., Corral-Santana, J.M., Dhillon, V.S., Fender, R., Gürpide, A., Heinke, C.O., Igl, A.B., Knigge, C., Markoff, S., Mastroserio, G., McCollough, M.L., Middleton, M., Miller, J.M., Miller-Jones, J.C.A., Motta, S.E., Paice, J.A., Pawar, D.D., Plotkin, R.M., Pradhan, P., Ressler, M.E., Russell, D.M., Russell, T.D., Santos-Sanz, P., Shahbaz, T., Sivakoff, G.R., Steeghs, D., Tetarenko, A.J., Tomsick, J.A., Vincentelli, F.M., George, M., Gurwell, M., Rao, R., and JWST Timing Consortium, 2025, Monthly Notices of the Royal Astronomical Society, 537, 1385-1403
7. *Calibrating the Clock of JWST*, Shaw, A.W., Kaplan, D.L., Gandhi, P., Maccarone, T.J., Borowski, E.S., Britt, C.T., Buckley, D.A.H., Burdge, K.B., Charles, P.A., Dhillon, V.S., French, R.G., Heinke, C.O., **Hynes, R.I.**, Knigge, C., Littlefair, S.P., Pawar, D., Plotkin, R.M., Ressler, M.E., Santos-Sanz, P., Shahbaz, T., Sivakoff, G.R., Stevens, A.L., 2025, The Astronomical Journal, 169, 21
8. *X-ray Timing and Spectral Effects on Optical Behavior in Cygnus X-2*, Igl, A., **Hynes, R.I.**, O'Brien, K., Robinson, E.L., Britt, C.T., 2024, Monthly Notices of the Royal Astronomical Society, 532, 241-258
9. *Links Between Optical and X-ray Light in Scorpius X-1*, Igl, A. B., **Hynes, R. I.**, Britt, C. T., O'Brien, K. S., Mikles, V., 2023, Monthly Notices of the Royal Astronomical Society, 526, 645-660
10. *X-ray observations of two candidate symbiotic binaries in the galactic bulge*, Wetuski, J., **Hynes, R. I.**, Maccarone, T. J., Heinke, C., Torres, M. A. P., Jonker, P. G., Britt, C. T., Steeghs, D., Nelemans, G., 2021, Monthly Notices of the Royal Astronomical Society, 506, 5619-5628
11. *Dynamical modelling of CXOGS J175553.2-281633: a 10 h long orbital period cataclysmic variable*, Gomez, S., Torres, M. A. P., Jonker, P. G., Kostrzewa-Rutkowska, Z., van Grunsven, T. F. J., Udalski, A., **Hynes, R. I.**, Heinke, C. O., Maccarone, T. J., Salinas, R., Strader, J., 2021, Monthly Notices of the Royal Astronomical Society, 502, 48-59
12. *Constraining the nature of the accreting binary in CXOGS J174623.5-310550*, Torres, M. A. P., Repetto, S., Wevers, T., Heida, M., Jonker, P. G., **Hynes, R. I.**, Nelemans, G., Wyrzykowski, L., Britt, C. T., Heinke, C. O., 2019, Monthly Notices of the Royal Astronomical Society, 487, 2296-2306

13. *Optical and X-ray Correlations During the 2015 Outburst of the Black Hole V404 Cyg* **Hynes, R. I.**, Robinson, E. L., Terndrup D. M., Gandhi, P., Froning, C. S., Wagner, R. M., Starrfield, S., Dhillon, V. S., Marsh, T. R., 2019, Monthly Notices of the Royal Astronomical Society, 487, 60-78
14. *An elevation of 0.1 light-seconds for the optical jet base in an accreting Galactic black hole system*, Gandhi, P., Bachetti, M., Dhillon, V. S., Fender, R. P., Hardy, L. K., Harrison, F. A., Littlefair, S. P., Malzac, J., Markoff, S., Marsh, T. R., Mooley, K., Stern, D., Tomsick, J. A., Walton, D. J., Casella, P., Vincentelli, F., Altamirano, D., Casares, J., Ceccobello, C., Charles, P. A., Ferrigno, C., **Hynes, R. I.**, Knigge, C., Kuulkers, E., Pahari, M., Rahoui, F., Russell, D. M., Shaw, A. W. 2017, Nature Astronomy, 1, 859-864
15. *Simultaneous Multiwavelength Observations of V404 Cygni during its 2015 June Outburst Decay Strengthen the Case for an Extremely Energetic Jet-base*, Maitra, D., Scarpaci, J. F., Grinberg, V. Reynolds, M. T., Markoff, S., Maccarone, T. J., **Hynes, R. I.**, 2017, The Astrophysical Journal, 851, 148 [11 pages]
16. *Spectroscopic classification of X-ray sources in the Galactic Bulge Survey*, Wevers, T., Torres, M. A. P., Jonker, P. G., Nelemans, G., Heinke, C., Mata Sánchez, D., Johnson, C. B., Gazer, R., Steeghs, D. T. H., Maccarone, T. J., **Hynes, R. I.**, Casares, J., Udalski, A., Wetuski, J., Britt, C. T., Kostrzewa-Rutkowska, Z., Wyrzykowski, Ł., 2017, Monthly Notices of the Royal Astronomical Society, 470, 4512-4529
17. *Expanding hot flow in the black hole binary SWIFT J1753.5-0127: evidence from optical timing*, Veledina, A., Gandhi, P., **Hynes, R.**, Kajava, J. J. E., Tsygankov, S. S., Revnivtsev, M. G., Durant, M., & Poutanen, J. 2017, Monthly Notices of the Royal Astronomical Society, 470, 48-59
18. *System mass constraints for the accreting millisecond pulsar XTE J1814-338 using Bowen fluorescence*, Wang, L., Steeghs, D., Casares, J., Charles, P. A., Munoz-Darias, T., Marsh, T. R., **Hynes, R. I.**, & O'Brien, K. 2017, Monthly Notices of the Royal Astronomical Society, 466, 2261-2271
19. *Candidate Ha emission and absorption line sources in the Galactic Bulge Survey*, Wevers, T., Jonker, P. G., Nelemans, G., Torres, M. A. P., Groot, P. J., Steeghs, D., Maccarone, T. J., **Hynes, R. I.**, Heinke, C., & Britt, C. 2017, Monthly Notices of the Royal Astronomical Society, 466, 163-173
20. *CXOGBS J174954.5-294335: a new deeply eclipsing intermediate polar*, Johnson, C. B., Torres, M. A. P., Hynes, R. I., Jonker, P. G., Heinke, C., Maccarone, T., Britt, C. T., Steeghs, D., Wevers, T., & Wu, J. 2017, Monthly Notices of the Royal Astronomical Society, 466, 129-137
21. *Discovery of a high state AM CVn binary in the Galactic Bulge Survey*, Wevers, T., Torres, M. A. P., Jonker, P. G., Wetuski, J. D., Nelemans, G., Steeghs, D., Maccarone, T. J., Heinke, C., Hynes, R. I., Udalski, A., Kostrzewa-Rutkowska, Z., Groot, P. J., Gazer, R., Szymanski, M. K., Britt, C. T., Wyrzykowski, Ł., & Poleski, R. 2016, Monthly Notices of the Royal Astronomical Society, 462, L106-L110
22. *Discovery of a long-lived, high-amplitude dusty infrared transient*, Britt, C. T., Maccarone, T. J., Green, J. D., Jonker, P. G., Hynes, R. I., Torres, M. A. P., Strader, J., Chomiuk, L., Salinas, R., Lucas, P., Contreras Pena, C., Kurtev, R., Heinke, C., Smith, L., Wright, N. J., Johnson, C., Steeghs, D., & Nelemans, G. 2016, Monthly Notices of the Royal Astronomical Society, 460, 2822-2833
23. *On the Optical-X-Ray Correlation from Outburst to Quiescence in Low-mass X-Ray Binaries: The Representative Cases of V404 Cyg and Cen X-4*, Bernardini, F., Russell, D. M., Kolojonen, K. I. I., Stella, L., Hynes, R. I., & Corbel, S. 2016, The Astrophysical Journal, 826, 149 [12 pages]
24. *Kepler K2 Observations of Sco X-1: Orbital Modulations and Correlations with Fermi GBM and MAXI*, **Hynes, R. I.**, Schaefer, B. E., Baum, Z. A., Hsu, C.-C. Cherry, M. L., Scaringi, S., 2016, Monthly Notices of the Royal Astronomical Society, 459, 3596-3613
25. *Furiously fast and red: sub-second optical flaring in V404 Cyg during the 2015 outburst peak*, Gandhi, P., Littlefair, S. P., Hardy, L. K., Dhillon, V. S., Marsh, T. R., Shaw, A. W., Altamirano, D., Caballero-Garcia, M. D., Casares, J., Casella, P., Castro-Tirado, A. J., Charles, P. A., Dallilar, Y., Eikenberry, S., Fender, R. P., **Hynes, R. I.**, Knigge, C., Kuulkers, E., Mooley, K., Muñoz-Darias, T., Pahari, M., Rahoui, F., Russell, D. M., Hernández Santisteban, J. V., Shahbaz, T., Terndrup, D. M., Tomsick, J., Walton, D. J., 2016, Monthly Notices of the Royal Astronomical Society, 459, 554-572
26. *The Chandra Galactic Bulge Survey: optical catalogue and point-source counterparts to X-ray sources*, Wevers, T., Hodgkin, S. T., Jonker, P. G., Bassa, C., Nelemans, G., van Grunsven, T., Gonzalez-Solares, E. A., Torres, M. A. P., Heinke, C., Steeghs, D., Maccarone, T. J., Britt, C., **Hynes, R. I.**, Johnson, C., Wu, J. 2016, Monthly Notices of the Royal Astronomical Society, 458, 4530-4546
27. *As Above, So Below: Exploiting Mass Scaling in Black Hole Accretion to Break Degeneracies in Spectral Interpretation*, Markoff, S., Nowak, M. A., Gallo, E., **Hynes, R. I.**, Wilms, J., Plotkin, R. M., Maitra, D., Silva, C. V., Drappeau, S., The Astrophysical Journal Letters, 812, L25 [6 pages]

28. *Sco X-1 revisited with Kepler, MAXI and HERMES: outflows, time-lags and echoes unveiled*, Scaringi, S., Maccarone, T. J., **Hynes, R. I.**, K rding, E., Ponti, G., Knigge, C., Britt, C. T., van Winckel, H., Monthly Notices of the Royal Astronomical Society, 451, 3857-3867
29. *The relationship between X-ray luminosity and duty cycle for dwarf novae and their specific frequency in the inner Galaxy*, Britt, C. T., Maccarone, T., Pretorius, M. L., **Hynes, R. I.**, Jonker, P. G., Torres, M. A. P., Knigge, C., Johnson, C. O., Heinke, C. B., Steeghs, D., Greiss, S., Nelemans, G. 2015, Monthly Notices of the Royal Astronomical Society, 448, 3455-3462
30. *Gemini Spectroscopy of Galactic Bulge Sources Reveals a Population of Hidden Accreting Binaries*, Wu, J., Jonker, P. G., Torres, M. A. P., Britt, C. T., Johnson, C. B., **Hynes, R. I.**, Greiss, S., Steeghs, D., Maccarone, T. J., 2015, Monthly Notices of the Royal Astronomical Society, 448, 1900-1915
31. *HD 314884: A Slowly Pulsating B star in a Close Binary*, Johnson, C. B., **Hynes, R. I.**, Maccarone, T., Britt, C. T., Davis, H., III, Jonker, P. G., Torres, M. A. P., Steeghs, D., Greiss, S., Nelemans, G. 2014, Monthly Notices of the Royal Astronomical Society, 444, 1584-1590
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