

Scott M. Ransom

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Experience

National Radio Astronomy Observatory (NRAO), Astronomer with Tenure, 2010–present
(Asst. Astronomer, 2004–2006; Assoc. Astronomer, 2006–2009, tenured in 2009)
University of Virginia, Visiting Research Professor of Astronomy, 2005–present
Senior Fellow, Gravity & the Extreme Universe, Canadian Institute for Advanced Research, 2017–present
McGill University Tomlinson Fellow / MIT Post-Doctoral Fellow, 2001–2004
Harvard University, Research Asst, Teaching Fellow, Beowulf SysAdmin, 1992–1994, 1999–2001
U.S. Army, Research Officer (Los Alamos NL 1991, 1992), Field Artillery Officer & Instructor, 1992–1999

Teaching

Univ. of Virginia, Astro 534: Graduate Radio Astronomy (with Jim Condon), Fall 2006, '08, '10, '12, '16

Education

Harvard University, Cambridge, MA: AM, Astronomy, 1994; PhD, Astronomy, 2001
Thesis: “New Search Techniques for Binary Pulsars”, Advisor: G. G. Fazio
Unites States Military Academy, West Point, NY: BS, Engineering Physics, 1992

Selected Honors

Fellow of the American Physical Society, 2015
Visiting Miller Professor, Miller Institute, UC Berkeley, Spring 2015
All Souls College Visiting Fellow, Oxford University, Fall 2014
American Astronomical Society Helen B. Warner Prize, 2010
Harvard University Bart J. Bok Prize, 2006
Hertz Foundation Graduate Fellowship, 1992–1994

Professional Committees

NAS Committee on Radio Frequencies (CORF), 2016–present
IAU Standards of Fundamental Astronomy (SOFA) board member, 2013–present
International SKA Science Working Group (SWG), 2007–2013; Pulsars SWG, 2013–present
Fermi Users Group, 2007–2012
Arecibo Users and Scientific Advisory Committee, 2007–2010
AAS High Energy Division Executive Committee, 2009–2011
US Decadal Survey 2010 Stars and Stellar Evolution Science Frontiers Panel, 2009

Graduate Students Supervised

Past: **Ryan Lynch**, UVa PhD, 2011 (now Green Bank Observatory scientist); **Anya Bilous**, UVa PhD, 2012 (now postdoc at Univ. Amsterdam, NL); **Tim Pennucci**, UVa PhD, 2015 (now postdoc at Eötvös Univ., Hungary); **Siraprapa Sanpa-Arsa**, UVa PhD, 2016 (now faculty at Chiang Mai Univ. Thailand), **Brian Prager**, UVa PhD, 2017 (now data scientist in industry)
Current: **Thankful Cromartie**, UVa PhD expected 2019

Refereed Publications (214 as of Jan. 20, 2018)

- Michilli et al., 2018, “An extreme magneto-ionic environment associated with the fast radio burst source FRB 121102”, *Nature*, 553, 182
- Law et al., 2017, “A Multi-telescope Campaign on FRB 121102: Implications for the FRB Population”, *ApJ*, 850, 76
- Gelfand et al., 2017, “The High-frequency Radio Emission of the Galactic Center Magnetar SGR J1745–29 during a Transitional Period”, *ApJ*, 850, 53
- Bassa et al., 2017, “LOFAR Discovery of the Fastest-spinning Millisecond Pulsar in the Galactic Field”, *ApJ*, 846, L20
- Scholz et al., 2017, “Simultaneous X-Ray, Gamma-Ray, and Radio Observations of the Repeating Fast Radio Burst FRB 121102”, *ApJ*, 846, 80
- Prager, **Ransom**, Freire, Hessels, Stairs, Arras, & Cadelano, 2017, “Using Long-term Millisecond Pulsar Timing to Obtain Physical Characteristics of the Bulge Globular Cluster Terzan 5”, *ApJ*, 845, 148
- Rankin et al., 2017, “Toward an Empirical Theory of Pulsar Emission. XII. Exploring the Physical Conditions in Millisecond Pulsar Emission Regions”, *ApJ*, 845, 23
- Chawla et al., 2017, “A Search for Fast Radio Bursts with the GBNCC Pulsar Survey”, *ApJ*, 844, 140
- Bassa et al., 2017, “FRB 121102 Is Coincident with a Star-forming Region in Its Host Galaxy”, *ApJ*, 843, L8
- Jones et al., 2017, “The NANOGrav Nine-year Data Set: Measurement and Analysis of Variations in Dispersion Measures”, *ApJ*, 841, 125
- Chatterjee, S., et al. 2017, “A direct localization of a fast radio burst and its host”, *Nature*, 541, 58
- Marcote, B., et al. 2017, “The Repeating Fast Radio Burst FRB 121102 as Seen on Milliarcsecond Angular Scales”, *ApJ*, 834, L8
- Tendulkar, S. P., et al. 2017, “The Host Galaxy and Redshift of the Repeating Fast Radio Burst FRB 121102”, *ApJ*, 834, L7
- Lyne, A. G., et al. 2017, “Timing of 29 Pulsars Discovered in the PALFA Survey”, *ApJ*, 834, 137
- Lyne, A. G., et al. 2017, “Two Long-Term Intermittent Pulsars Discovered in the PALFA Survey”, *ApJ*, 834, 72
- Lam, M. T., et al. 2017, “The NANOGrav Nine-year Data Set: Excess Noise in Millisecond Pulsar Arrival Times”, *ApJ*, 834, 35
- Stovall, K., et al. 2016, “Timing of Five PALFA-discovered Millisecond Pulsars”, *ApJ*, 833, 192
- Scholz, P., et al. 2016, “The Repeating Fast Radio Burst FRB 121102: Multi-wavelength Observations and Additional Bursts”, *ApJ*, 833, 177
- Fonseca, E., et al. 2016, “The NANOGrav Nine-year Data Set: Mass and Geometric Measurements of Binary Millisecond Pulsars”, *ApJ*, 832, 167
- Lazarus, P., et al. 2016, “Einstein@Home Discovery of a Double Neutron Star Binary in the PALFA Survey”, *ApJ*, 831, 150
- Kaplan, D. L., et al. 2016, “PSR J1024–0719: A Millisecond Pulsar in an Unusual Long-period Orbit”, *ApJ*, 826, 86
- Abbott, B. P., et al. 2016, “Search for transient gravitational waves in coincidence with short-duration radio transients during 2007-2013”, *Phys. Rev. D*, 93, 122008
- Deneva, J. S., et al. 2016, “Multiwavelength Observations of the Redback Millisecond Pulsar J1048+2339”, *ApJ*, 823, 105
- Lentati, L., et al. 2016, “From spin noise to systematics: stochastic processes in the first International Pulsar Timing Array data release”, *MNRAS*, 458, 2161

- Verbiest, J. P. W., et al. 2016, “The International Pulsar Timing Array: First data release”, *MNRAS*, 458, 1267
- Dolch, T., et al. 2016, “Single-Source Gravitational Wave Limits From the J1713+0747 24-hr Global Campaign”, *Journal of Physics Conference Series*, 716, 012014
- Spiewak, R., et al. 2016, “Ordinary X-Rays from Three Extraordinary Millisecond Pulsars: XMM-Newton Observations of PSRs J0337+1715, J0636+5129, and J0645+5158”, *ApJ*, 822, 37
- Arzoumanian, Z., et al. 2016, “The NANOGrav Nine-year Data Set: Limits on the Isotropic Stochastic Gravitational Wave Background”, *ApJ*, 821, 13
- Camilo, F., et al. 2016, “Radio Disappearance of the Magnetar XTE J1810-197 and Continued X-ray Timing”, *ApJ*, 820, 110
- Spitler, L. G., et al. 2016, “A repeating fast radio burst”, *Nature*, 531, 202
- Camilo, F., et al. 2016, “Discovery of a Millisecond Pulsar in the 5.4 day Binary 3FGL J1417.5-4402: Observing the Late Phase of Pulsar Recycling”, *ApJ*, 820, 6
- Lam, M. T., et al. 2016, “The NANOGrav Nine-year Data Set: Noise Budget for Pulsar Arrival Times on Intraday Timescales”, *ApJ*, 819, 155
- Cromartie, H. T., et al. 2016, “Six New Millisecond Pulsars from Arecibo Searches of Fermi Gamma-Ray Sources”, *ApJ*, 819, 34
- Levin, L., et al. 2016, “The NANOGrav Nine-year Data Set: Monitoring Interstellar Scattering Delays”, *ApJ*, 818, 166
- Matthews, A. M., et al. 2016, “The NANOGrav Nine-year Data Set: Astrometric Measurements of 37 Millisecond Pulsars”, *ApJ*, 818, 92
- Bhattacharyya, B., et al. 2016, “The GMRT High Resolution Southern Sky Survey for Pulsars and Transients. I. Survey Description and Initial Discoveries”, *ApJ*, 817, 130
- Bellm, E. C., et al. 2016, “Properties and Evolution of the Redback Millisecond Pulsar Binary PSR J2129-0429”, *ApJ*, 816, 74
- Bochenek, C., **Ransom, S.**, & Demorest, P. 2015, “The Feasibility of Using Black Widow Pulsars in Pulsar Timing Arrays for Gravitational Wave Detection”, *ApJ*, 813, L4
- The NANOGrav Collaboration, et al. 2015, “The NANOGrav Nine-year Data Set: Observations, Arrival Time Measurements, and Analysis of 37 Millisecond Pulsars”, *ApJ*, 813, 65
- Lazarus, P., et al. 2015, “Arecibo Pulsar Survey Using ALFA. IV. Mock Spectrometer Data Analysis, Survey Sensitivity, and the Discovery of 40 Pulsars”, *ApJ*, 812, 81
- Arzoumanian, Z., et al. 2015, “NANOGrav Constraints on Gravitational Wave Bursts with Memory”, *ApJ*, 810, 150
- Camilo, F., et al. 2015, “Parkes Radio Searches of Fermi Gamma-Ray Sources and Millisecond Pulsar Discoveries”, *ApJ*, 810, 85
- Karako-Argaman, C., et al. 2015, “Discovery and Follow-up of Rotating Radio Transients with the Green Bank and LOFAR Telescopes”, *ApJ*, 809, 67
- Zhu, W. W., et al. 2015, “Testing Theories of Gravitation Using 21-Year Timing of Pulsar Binary J1713+0747”, *ApJ*, 809, 41
- DeCesar, M. E., **Ransom, S. M.**, Kaplan, D. L., Ray, P. S., & Geller, A. M. 2015, “A Highly Eccentric 3.9 Millisecond Binary Pulsar in the Globular Cluster NGC 6652”, *ApJ*, 807, L23
- Cadelano, M., et al. 2015, “Radio Timing and Optical Photometry of the Black Widow System PSR J1953+1846A in the Globular Cluster M71”, *ApJ*, 807, 91
- Knispel, B., et al. 2015, “Einstein@Home Discovery of a PALFA Millisecond Pulsar in an Eccentric Binary Orbit”, *ApJ*, 806, 140

- Bilous, A. V., Pennucci, T. T., Demorest, P., & **Ransom, S. M.** 2015, “A Broadband Radio Study of the Average Profile and Giant Pulses from PSR B1821-24A”, *ApJ*, 803, 83
- Scholz, P., et al. 2015, “Timing of Five Millisecond Pulsars Discovered in the PALFA Survey”, *ApJ*, 800, 123
- van Leeuwen, J., et al. 2015, “The Binary Companion of Young, Relativistic Pulsar J1906+0746”, *ApJ*, 798, 118
- Hessels, J., et al. 2015, “Pulsars in Globular Clusters with the SKA”, *Advancing Astrophysics with the Square Kilometre Array (AASKA14)*, 47
- Eatough, R., et al. 2015, “Observing Radio Pulsars in the Galactic Centre with the Square Kilometre Array”, *Advancing Astrophysics with the Square Kilometre Array (AASKA14)*, 45
- Watts, A., et al. 2015, “Probing the neutron star interior and the Equation of State of cold dense matter with the SKA”, *Advancing Astrophysics with the Square Kilometre Array (AASKA14)*, 43
- Shao, L., et al. 2015, “Testing Gravity with Pulsars in the SKA Era”, *Advancing Astrophysics with the Square Kilometre Array (AASKA14)*, 42
- Keane, E., et al. 2015, “A Cosmic Census of Radio Pulsars with the SKA”, *Advancing Astrophysics with the Square Kilometre Array (AASKA14)*, 40
- Pallanca, C., **Ransom, S. M.**, Ferraro, F. R., Dalessandro, E., Lanzoni, B., Hessels, J. W. T., Stairs, I., & Freire, P. C. C. 2014, “Radio Timing and Optical Photometry of the Black Widow System PSR J1518+0204C in the Globular Cluster M5”, *ApJ*, 795, 29
- Arzoumanian, Z., et al. 2014, “Gravitational Waves from Individual Supermassive Black Hole Binaries in Circular Orbits: Limits from the North American Nanohertz Observatory for Gravitational Waves”, *ApJ*, 794, 141
- Dolch, T., et al. 2014, “A 24 Hr Global Campaign to Assess Precision Timing of the Millisecond Pulsar J1713+0747”, *ApJ*, 794, 21
- Stovall, K., et al. 2014, “The Green Bank Northern Celestial Cap Pulsar Survey. I. Survey Description, Data Analysis, and Initial Results”, *ApJ*, 791, 67
- Spitler, L. G., et al. 2014, “Fast Radio Burst Discovered in the Arecibo Pulsar ALFA Survey”, *ApJ*, 790, 101
- Pennucci, T. T., Demorest, P. B., & **Ransom, S. M.** 2014, “Elementary Wideband Timing of Radio Pulsars”, *ApJ*, 790, 93
- Kaplan, D. L., et al. 2014, “A 1.05 M_{sun} Companion to PSR J2222-0137: The Coolest Known White Dwarf?”, *ApJ*, 789, 119
- Rickett, B. J., et al. 2014, “Interstellar Scintillation of the Double Pulsar J0737-3039”, *ApJ*, 787, 161
- Swiggum, J. K., et al. 2014, “Arecibo Pulsar Survey Using ALFA. III. Precursor Survey and Population Synthesis”, *ApJ*, 787, 137
- Aasi, J., et al. 2014, “Gravitational Waves from Known Pulsars: Results from the Initial Detector Era”, *ApJ*, 785, 119
- Kaplan, D. L., van Kerkwijk, M. H., Koester, D., Stairs, I. H., **Ransom, S. M.**, Archibald, A. M., Hessels, J. W. T., & Boyles, J. 2014, “Spectroscopy of the Inner Companion of the Pulsar PSR J0337+1715”, *ApJ*, 783, L23
- Gentile, P. A., et al. 2014, “X-Ray Observations of Black Widow Pulsars”, *ApJ*, 783, 69
- Roberts, M. S. E., McLaughlin, M. A., Gentile, P., Aliu, E., Hessels, J. W. T., **Ransom, S. M.**, & Ray, P. S. 2014, “Intrabinary shock emission from “black widows” and “redbacks””, *Astronomische Nachrichten*, 335, 313
- Zhu, W. W., et al. 2014, “Searching for Pulsars Using Image Pattern Recognition”, *ApJ*, 781, 117
- Ransom, S. M.**, et al. 2014, “A millisecond pulsar in a stellar triple system”, *Nature* 505, 520

- Johnson, T. J., et al. 2013, “Broadband Pulsations from PSR B1821–24: Implications for Emission Models and the Pulsar Population of M28”, *ApJ*, 778, 106
- Chomiuk, L., Strader, J., Maccarone, T. J., Miller-Jones, J. C. A., Heinke, C., Noyola, E., Seth, A. C., & **Ransom, S.** 2013, “A Radio-selected Black Hole X-Ray Binary Candidate in the Milky Way Globular Cluster M62”, *ApJ*, 777, 69
- Abdo, A. A., et al. 2013, “The Second Fermi Large Area Telescope Catalog of Gamma-Ray Pulsars”, *ApJS*, 208, 17
- Papitto, A., et al. 2013, “Swings between rotation and accretion power in a binary millisecond pulsar”, *Nature*, 501, 517
- Bhattacharyya, B., et al. 2013, “GMRT Discovery of PSR J1544+4937: An Eclipsing Black-widow Pulsar Identified with a Fermi-LAT Source”, *ApJ*, 773, L12
- Allen, B., et al. 2013, “The Einstein@Home Search for Radio Pulsars and PSR J2007+2722 Discovery”, *ApJ*, 773, 91
- Lee, K. J., et al. 2013, “PEACE: pulsar evaluation algorithm for candidate extraction - a software package for post-analysis processing of pulsar survey candidates”, *MNRAS*, 433, 688
- Nice, D. J., et al. 2013, “Timing and Interstellar Scattering of 35 Distant Pulsars Discovered in the PALFA Survey”, *ApJ*, 772, 50
- Deller, A. T., Boyles, J., Lorimer, D. R., Kaspi, V. M., McLaughlin, M. A., **Ransom, S.**, Stairs, I. H., & Stovall, K. 2013, “VLBI Astrometry of PSR J2222-0137: A Pulsar Distance Measured to 0.4% Accuracy”, *ApJ*, 770, 145
- Breton, R. P., et al. 2013, “Discovery of the Optical Counterparts to Four Energetic Fermi Millisecond Pulsars”, *ApJ*, 769, 108
- Bietenholz, M. F., Kondratiev, V., **Ransom, S.**, Slane, P., Bartel, N., & Buchner, S. 2013, “The proper motion of PSR J0205+6449 in 3C 58”, *MNRAS*, 431, 2590
- Rosen, R., et al. 2013, “The Pulsar Search Collaboratory: Discovery and Timing of Five New Pulsars”, *ApJ*, 768, 85
- Antoniadis, J., et al. 2013, “A Massive Pulsar in a Compact Relativistic Binary”, *Science*, 340, 448
- Espinoza, C. M., et al. 2013, “Six millisecond pulsars detected by the Fermi Large Area Telescope and the radio/gamma-ray connection of millisecond pulsars”, *MNRAS*, 430, 571
- Barr, E. D., et al. 2013, “Pulsar searches of Fermi unassociated sources with the Effelsberg telescope”, *MNRAS*, 429, 1633
- Lynch, R. S., et al. 2013, “The Green Bank Telescope 350 MHz Drift-scan Survey II: Data Analysis and the Timing of 10 New Pulsars, Including a Relativistic Binary”, *ApJ*, 763, 81
- Boyles, J., et al. 2013, “The Green Bank Telescope 350 MHz Drift-scan survey. I. Survey Observations and the Discovery of 13 Pulsars”, *ApJ*, 763, 80
- Ray, P. S., et al. 2013, “Radio Detection of the Fermi-LAT Blind Search Millisecond Pulsar J1311-3430”, *ApJ*, 763, L13
- Demorest, P. B., et al. 2013, “Limits on the Stochastic Gravitational Wave Background from the North American Nanohertz Observatory for Gravitational Waves”, *ApJ*, 762, 94
- Mickaliger, M. B., et al. 2012, “A Giant Sample of Giant Pulses from the Crab Pulsar”, *ApJ*, 760, 64
- Roshi, D. A., & **Ransom, S. M.** 2012, “A compact steep spectrum radio source in NGC 1977”, *A&A*, 546, A25
- Crawford, F., et al. 2012, “Four Highly Dispersed Millisecond Pulsars Discovered in the Arecibo PALFA Galactic Plane Survey”, *ApJ*, 757, 90
- Deneva, J. S., et al. 2012, “Two Millisecond Pulsars Discovered by the PALFA Survey and a Shapiro Delay Measurement”, *ApJ*, 757, 89

- Deller, A. T., et al. 2012, “A Parallax Distance and Mass Estimate for the Transitional Millisecond Pulsar System J1023+0038”, *ApJ*, 756, L25
- Lynch, R. S., Lorimer, D. R., **Ransom, S. M.**, & Boyles, J. 2012, “A Population of Non-recycled Pulsars Originating in Globular Clusters”, *ApJ*, 756, 78
- Massari, D., et al. 2012, “High-resolution Reddening Map in the Direction of the Stellar System Terzan 5”, *ApJ*, 755, L32
- Pletsch, H. J., et al. 2012, “PSR J1838-0537: Discovery of a Young, Energetic Gamma-Ray Pulsar”, *ApJ*, 755, L20
- Kaplan, D. L., et al. 2012, “Discovery of the Optical/Ultraviolet/Gamma-Ray Counterpart to the Eclipsing Millisecond Pulsar J1816+4510”, *ApJ*, 753, 174
- Guillemot, L., et al. 2012, “Discovery of the millisecond pulsar PSR J2043+1711 in a Fermi source with the Nançay Radio Telescope”, *MNRAS*, 422, 1294
- Bilous, A. V., McLaughlin, M. A., Kondratiev, V. I., & **Ransom, S. M.** 2012, “Correlation of Chandra Photons with the Radio Giant Pulses from the Crab Pulsar”, *ApJ*, 749, 24
- Kerr, M., et al. 2012, “Five New Millisecond Pulsars from a Radio Survey of 14 Unidentified Fermi-LAT Gamma-Ray Sources”, *ApJ*, 748, L2
- Breton, R. P., et al. 2012, “The Double Pulsar Eclipses. I. Phenomenology and Multi-frequency Analysis”, *ApJ*, 747, 89
- Camilo, F., **Ransom, S. M.**, Chatterjee, S., Johnston, S., & Demorest, P. 2012, “PSR J1841-0500: A Radio Pulsar That Mostly is Not There”, *ApJ*, 746, 63
- Camilo, F., et al. 2012, “PSR J2030+3641: Radio Discovery and Gamma-Ray Study of a Middle-aged Pulsar in the Now Identified Fermi-LAT Source 1FGL J2030.0+3641”, *ApJ*, 746, 39
- Lynch, R. S., Freire, P. C. C., **Ransom, S. M.**, & Jacoby, B. A. 2012, “The Timing of Nine Globular Cluster Pulsars”, *ApJ*, 745, 109
- Pletsch, H. J., et al. 2012, “Discovery of Nine Gamma-Ray Pulsars in Fermi Large Area Telescope Data Using a New Blind Search Method”, *ApJ*, 744, 105
- Guillemot, L., et al. 2012, “Pulsed Gamma Rays from the Original Millisecond and Black Widow Pulsars: A Case for Caustic Radio Emission?”, *ApJ*, 744, 33
- Gonzalez, M. E., et al. 2011, “High-precision Timing of Five Millisecond Pulsars: Space Velocities, Binary Evolution, and Equivalence Principles”, *ApJ*, 743, 102
- Bogdanov, S., Archibald, A. M., Hessels, J. W. T., Kaspi, V. M., Lorimer, D., McLaughlin, M. A., **Ransom, S. M.**, & Stairs, I. H. 2011, “A Chandra X-Ray Observation of the Binary Millisecond Pulsar PSR J1023+0038”, *ApJ*, 742, 97
- Freire, P. C. C., et al. 2011, “Fermi Detection of a Luminous γ -Ray Pulsar in a Globular Cluster”, *Science*, 334, 1107
- Boyles, J., Lorimer, D. R., Turk, P. J., Mnatsakanov, R., Lynch, R. S., **Ransom, S. M.**, Freire, P. C., & Belczynski, K. 2011, “Young Radio Pulsars in Galactic Globular Clusters”, *ApJ*, 742, 51
- Arzoumanian, Z., Gotthelf, E. V., **Ransom, S. M.**, Safi-Harb, S., Kothes, R., & Landecker, T. L. 2011, “Discovery of an Energetic Pulsar Associated with SNR G76.9+1.0”, *ApJ*, 739, 39
- McSwain, M. V., Ray, P. S., **Ransom, S. M.**, Roberts, M. S. E., Dougherty, S. M., & Pooley, G. G. 2011, “A Radio Pulsar Search of the γ -ray Binaries LS I +61 303 and LS 5039”, *ApJ*, 738, 105
- Keith, M. J., et al. 2011, “Discovery of millisecond pulsars in radio searches of southern Fermi Large Area Telescope sources”, *MNRAS*, 414, 1292
- Ray, P. S., et al. 2011, “Precise γ -ray Timing and Radio Observations of 17 Fermi γ -ray Pulsars”, *ApJS*, 194, 17

- Lynch, R. S., **Ransom, S. M.**, Freire, P. C. C., & Stairs, I. H. 2011, “Six New Recycled Globular Cluster Pulsars Discovered with the Green Bank Telescope”, *ApJ*, 734, 89
- Knispel, B., et al. 2011, “Arecibo PALFA Survey and Einstein@Home: Binary Pulsar Discovery by Volunteer Computing”, *ApJ*, 732, L1
- Cognard, I., et al. 2011, “Discovery of Two Millisecond Pulsars in Fermi Sources with the Nançay Radio Telescope”, *ApJ*, 732, 47
- Freire, P. C. C., et al. 2011, “On the nature and evolution of the unique binary pulsar J1903+0327”, *MNRAS*, 412, 2763
- Bogdanov, S., et al. 2011, “Chandra X-ray Observations of 12 Millisecond Pulsars in the Globular Cluster M28”, *ApJ*, 730, 81
- Messenger, C., Lommen, A., Demorest, P., & **Ransom, S.** 2011, “A Bayesian parameter estimation approach to pulsar time-of-arrival analysis”, *Classical and Quantum Gravity*, 28, 055001
- Lynch, R. S., & **Ransom, S. M.** 2011, “A New Pulsar in Green Bank Telescope Searches of 10 Globular Clusters”, *ApJ*, 730, L11
- Bilous, A. V., Kondratiev, V. I., McLaughlin, M. A., **Ransom, S. M.**, Lyutikov, M., Mickaliger, M., & Langston, G. I. 2011, “Correlation of Fermi Photons with High-frequency Radio Giant Pulses from the Crab Pulsar”, *ApJ*, 728, 110
- Ransom, S. M.**, et al. 2011, “Three Millisecond Pulsars in Fermi LAT Unassociated Bright Sources”, *ApJ*, 727, L16
- Ackermann, M., et al. 2011, “Fermi-LAT Search for Pulsar Wind Nebulae Around Gamma-ray Pulsars”, *ApJ*, 726, 35
- Pallanca, C., et al. 2010, “The Optical Companion to the Binary Millisecond Pulsar J1824-2452H in the Globular Cluster M28”, *ApJ*, 725, 1165
- Saz Parkinson, P. M., et al. 2010, “Eight γ -ray Pulsars Discovered in Blind Frequency Searches of Fermi LAT Data”, *ApJ*, 725, 571
- Özel, F., Psaltis, D., **Ransom, S.**, Demorest, P., & Alford, M. 2010, “The Massive Pulsar PSR J1614-2230: Linking Quantum Chromodynamics, Gamma-ray Bursts, and Gravitational Wave Astronomy”, *ApJ*, 724, L199
- Demorest, P. B., Pennucci, T., **Ransom, S. M.**, Roberts, M. S. E., & Hessels, J. W. T. 2010, “A two-solar-mass neutron star measured using Shapiro delay”, *Nature*, 467, 1081
- Archibald, A. M., Kaspi, V. M., Bogdanov, S., Hessels, J. W. T., Stairs, I. H., **Ransom, S. M.**, & McLaughlin, M. A. 2010, “X-ray Variability and Evidence for Pulsations from the Unique Radio Pulsar/X-ray Binary Transition Object FIRST J102347.6+003841”, *ApJ*, 722, 88
- Knispel, B., et al. 2010, “Pulsar Discovery by Global Volunteer Computing”, *Science*, 329, 1305
- Lanzoni, B., et al. 2010, “New Density Profile and Structural Parameters of the Complex Stellar System Terzan 5”, *ApJ*, 717, 653
- Macquart, J.-P., Kanekar, N., Frail, D. A., & **Ransom, S. M.** 2010, “A High-frequency Search for Pulsars within the Central Parsec of Sgr A*”, *ApJ*, 715, 939
- Hobbs, G., et al. 2010, “The International Pulsar Timing Array Project: Using Pulsars as a Gravitational Wave Detector”, *Classical and Quantum Gravity*, 27, 084013
- Abdo, A. A., et al. 2010, “The First Fermi Large Area Telescope Catalog of Gamma-ray Pulsars”, *ApJS*, 187, 460
- Abbott, B. P., et al. 2010, “Searches for Gravitational Waves from Known Pulsars with Science Run 5 LIGO Data”, *ApJ*, 713, 671
- Abdo, A. A., et al. 2010, “Fermi Large Area Telescope Observations of PSR J1836+5925”, *ApJ*, 712, 1209

- Abdo, A. A., et al. 2010, “Discovery of Pulsed γ -Rays from PSR J0034-0534 with the Fermi Large Area Telescope: A Case for Co-Located Radio and γ -Ray Emission Regions”, *ApJ*, 712, 957
- Weltevrede, P., et al. 2010, “Gamma-ray and Radio Properties of Six Pulsars Detected by the *Fermi* Large Area Telescope”, *ApJ*, 708, 1426
- Ferraro, F. R., et al. 2009, “Terzan 5: the remnant of a primordial building-block of the Galactic Bulge”, *Nature*, 462, 483
- Abdo, A. A., et al. 2009, “*Fermi* Large Area Telescope Detection of Pulsed γ -rays from the Vela-like Pulsars PSR J1048–5832 and PSR J2229+6114”, *ApJ*, 706, 1331
- Livingstone, M. A., **Ransom, S. M.**, Camilo, F., Kaspi, V. M., Lyne, A. G., Kramer, M., & Stairs, I. H. 2009, “X-ray and Radio Timing of the Pulsar in 3C 58”, *ApJ*, 706, 1163
- Camilo, F., Ray, P. S., **Ransom, S. M.**, et al. 2009, “Radio Detection of LAT PSRs J1741–2054 and J2032+4127: No Longer Just Gamma-ray Pulsars”, *ApJ*, 705, 1
- Deneva, J. S., et al. 2009, “Arecibo Pulsar Survey Using ALFA: Probing Radio Pulsar Intermittency And Transients”, *ApJ*, 703, 2259
- Wang, Z., Archibald, A. M., Thorstensen, J. R., Kaspi, V. M., Lorimer, D. R., Stairs, I., & **Ransom, S. M.** 2009, “SDSS J102347.6+003841: A Millisecond Radio Pulsar Binary That Had a Hot Disk During 2000-2001”, *ApJ*, 703, 2017
- Camilo, F., Ng, C.-Y., Gaensler, B. M., **Ransom, S. M.**, Chatterjee, S., Reynolds, J., & Sarkissian, J. 2009, “Out of the Frying Pan: A Young Pulsar with a Long Radio Trail Emerging from SNR G315.9–0.0”, *ApJ*, 703, L55
- Abdo, A. A., et al. 2009, “A Population of Gamma-Ray Millisecond Pulsars Seen with the *Fermi* Large Area Telescope”, *Science*, 325, 848
- Abdo, A. A., et al. 2009, “Pulsed Gamma-rays from PSR J2021+3651 with the *Fermi* Large Area Telescope”, *ApJ*, 700, 1059
- Camilo, F., **Ransom, S. M.**, Gaensler, B. M., & Lorimer, D. R. 2009, “Discovery of the Energetic Pulsar J1747–2809 in the Supernova Remnant G0.9+0.1”, *ApJ*, 700, L34
- Abdo, A. A., et al. 2009, “Discovery of Pulsations from the Pulsar J0205+6449 in SNR 3C 58 with the *Fermi* Gamma-Ray Space Telescope”, *ApJ*, 699, L102
- Archibald, A. M., Stairs, I. H., **Ransom, S. M.**, et al. 2009, “A Radio Pulsar / X-ray Binary Link”, *Science*, 324, 1411
- Abdo, A. A., et al. 2009, “*Fermi* Large Area Telescope Observations of the Vela Pulsar”, *ApJ*, 696, 1084
- Smith, D. A. and the *Fermi* Pulsar Timing Collaboration 2008, “Pulsar Timing for the *Fermi* gamma-ray space telescope”, *A&A*, 492, 923
- Halpern, J. P., et al. 2008, “Discovery of High-Energy Gamma-Ray Pulsations from PSR J2021+3651 with AGILE”, *ApJ*, 688, L33
- Elsner, R. F., et al. 2008, “*Chandra* X-ray Observatory Observations of the Globular Cluster M71”, *ApJ*, 687, 1019
- Hessels, J. W. T. and the Pulsar-ALFA Consortium 2008, “PSR J1856+0245: Arecibo Discovery of a Young, Energetic Pulsar Coincident with the TeV γ -ray Source HESS J1857+026”, *ApJ*, 682, L41
- Breton, R. P., Kaspi, V. M., Kramer, M., McLaughlin, M. A., Lyutikov, M., **Ransom, S. M.**, Stairs, I. H., Ferdman, R. D., Camilo, F., & Possenti, A. 2008, “Relativistic Spin Precession in the Double Pulsar”, *Science*, 321, 104
- Champion, D., **Ransom, S. M.** and the Pulsar-ALFA Consortium 2008, “An Eccentric Binary Millisecond Pulsar in the Galactic Plane”, *Science*, 320, 1309
- Trenti, M., **Ransom, S. M.**, Hut, P., & Hoggie, D. C. 2008, “Predictions for Triple Stars with and without a Pulsar in Star Clusters”, *MNRAS*, 387, 815

- Camilo, F., Reynolds, J., Johnston, S., Halpern, J. P., & **Ransom, S. M.** 2008, “The Magnetar 1E 1547.0–5408: Radio Spectrum, Polarimetry, and Timing”, *ApJ*, 679, 681
- Cocozza, G., Ferraro, F. R., Possenti, A., Beccari, G., Lanzoni, B., **Ransom, S. M.**, Rood, R. T., & D’Amico, N. 2008, “A puzzling millisecond pulsar companion in NGC 6266”, *ApJ*, 679, 105
- Minter, A. H., Camilo, F., **Ransom, S. M.**, Halpern, J. P., & Zimmerman, N. 2008, “Neutral Hydrogen Absorption Toward XTE J1810–197: the Distance to a Radio-Emitting Magnetar”, *ApJ*, 676, 1189
- Halpern, J. P., Gotthelf, E. V., Reynolds, J., **Ransom, S. M.**, & Camilo, F. 2008, “Outburst of the 2 S Anomalous X-ray Pulsar 1E 1547.0–5408”, *ApJ*, 676, 1178
- Freire, P. C. C., **Ransom, S. M.**, Bégin, S., Stairs, I. H., Hessels, J. W. T., Frey, L. H., & Camilo, F. 2008, “Eight New Millisecond Pulsars in NGC 6440 and NGC 6441”, *ApJ*, 675, 670
- Hessels, J. W. T., **Ransom, S. M.**, Stairs, I. H., Kaspi, V. M., & Freire, P. C. C. 2007, “A 1.4-GHz Arecibo Survey for Pulsars in Globular Clusters”, *ApJ*, 670, 363
- Camilo, F., **Ransom, S. M.**, et al. 2007, “The Variable Radio-to-X-ray Spectrum of the Magnetar XTE J1810–197”, *ApJ*, 669, 561
- Camilo, F., **Ransom, S. M.**, Halpern, J. P., & Reynolds, J. 2007, “1E 1547.0–5408: A Radio-Emitting Magnetar with a Rotation Period of 2 Seconds”, *ApJ*, 666, L93
- Camilo, F., Cognard, I., **Ransom, S. M.**, et al. 2007, “The Magnetar XTE J1810–197: Variations in Torque, Radio Flux Density and Pulse Profile Morphology”, *ApJ*, 663, 497
- Helfand, D. J., Chatterjee, S., Briskin, W. F., Camilo, F., Reynolds, J., van Kerkwijk, M. H., Halpern, J. P., & **Ransom, S. M.** 2007, “VLBA measurement of the transverse velocity of the magnetar XTE J1810–197”, *ApJ*, 662, 1198
- Freire, P. C. C., **Ransom, S. M.**, & Gupta, Y. 2007, “Timing the Eccentric Binary Millisecond Pulsar in NGC 1851”, *ApJ*, 662, 1177
- Breton, R. P., Roberts, M. S. E., **Ransom, S. M.**, Kaspi, V. M., Durant, M., Bergeron, P., & Faulkner, A. 2007, “The Unusual Binary Pulsar PSR J1744–3922: Radio Flux Variability, Near-Infrared Observation, and Evolution”, *ApJ*, 661, 1073
- McSwain, M. V., **Ransom, S. M.**, Boyajian, T. S., Grundstrom, E. D., & Roberts, M. S. E. 2007, “Runaway Massive Binaries and Cluster Ejection Scenarios”, *ApJ*, 660, 740
- Cameron, P. B., Rutledge, R. E., Camilo, F., Bildsten, L., **Ransom, S. M.**, & Kulkarni, S. R. 2007, “Variability of 19 Millisecond Pulsars in 47 Tucanae with *CHANDRA* HRC-S”, *ApJ*, 660, 587
- Camilo, F., Reynolds, J., Johnston, S., Halpern, J. P., **Ransom, S. M.**, & van Straten, W. 2007, “Polarized Radio Emission from the Magnetar XTE J1810–197”, *ApJ*, 659, L37
- Crawford, F., Roberts, M. S. E., Hessels, J. W. T., **Ransom, S. M.**, Livingstone, M., Tam, C. R., & Kaspi, V. M. 2006, “A Survey of 56 Mid-latitude EGRET Error Boxes for Radio Pulsars”, *ApJ*, 652, 1499
- Camilo, F., **Ransom, S. M.**, Halpern, J., Reynolds, J., Helfand, D., Zimmerman, N., & Sarkissian, J. 2006, “Transient pulsed radio emission from a magnetar”, *Nature*, 442, 892
- Hessels, J. W. T., **Ransom, S. M.**, Stairs, I. H., Freire, P. C. C., Kaspi, V. M., & Camilo, F. 2006, “A Radio Pulsar Spinning at 716 Hz”, *Science*, 311, 1901
- Lorimer, D. R. and the Pulsar-ALFA Consortium 2006, “Arecibo Pulsar Survey Using ALFA. II. The Young, Highly Relativistic Binary Pulsar J1906+0746”, *ApJ*, 640, L428
- Camilo, F., **Ransom, S. M.**, Gaensler, B. M., Slane, P. O., Lorimer, D. R., Reynolds, J., Manchester, R. N., & Murray, S. S. 2006, “PSR J1833–1034: Discovery of the Central Young Pulsar in the Supernova Remnant G21.5–0.9”, *ApJ*, 637, 456
- Cordes, J. M. and the Pulsar-ALFA Consortium 2006, “Arecibo Pulsar Survey Using ALFA. I. Survey Strategy and First Discoveries”, *ApJ*, 637, 446

- McGarry, M. B., Gaensler, B. M., **Ransom, S. M.**, Kaspi, V. M., & Veljkovic, S. 2005, “X-Ray Timing, Spectroscopy, and Photometry of the Anomalous X-Ray Pulsar Candidate CXOU J010043.1–721134”, *ApJ*, 627, L137
- Kaplan, D. L., et al. 2005, “The Green Bank Telescope Pulsar Spigot”, *PASP*, 117, 643
- Lorimer, D. R., et al. 2005, “Discovery of 10 pulsars in an Arecibo drift-scan survey”, *MNRAS*, 359, 1524
- Dib, R., **Ransom, S. M.**, Ray, P. S., Kaspi, V. M., & Archibald, A. M. 2005, “An RXTE Archival Search for Coherent X-Ray Pulsations in the Low-Mass X-Ray Binary 4U 1820–30”, *ApJ*, 626, 333
- Freire, P. C. C., Hessels, J. W. T., Nice, D. J., **Ransom, S. M.**, Lorimer, D. R., & Stairs, I. H. 2005, “The Millisecond Pulsars in NGC 6760”, *ApJ*, 621, 959
- Ransom, S. M.**, Hessels, J. W. T., Stairs, I. H., Freire, P. C. C., Camilo, F., Kaspi, V. M., & Kaplan, D. L. 2005, “Twenty-One Millisecond Pulsars in Terzan 5 Using the Green Bank Telescope”, *Science*, 307, 892
- Demorest, P., Ramachandran, R., Backer, D. C., **Ransom, S. M.**, Kaspi, V., Arons, J., & Spitkovsky, A. 2004, “Orientations of Spin and Magnetic Dipole Axes of Pulsars in the J0737–3039 Binary Based on Polarimetry Observations at the Green Bank Telescope”, *ApJ*, 615, L137
- Kaspi, V. M., **Ransom, S. M.**, Backer, D. C., Ramachandran, R., Demorest, P., Arons, J., & Spitkovsky, A. 2004, “Green Bank Telescope Observations of the Eclipse of Pulsar “A” in the Double Pulsar Binary PSR J0737–3039”, *ApJ*, 613, L137
- Halpern, J. P., Gotthelf, E. V., Camilo, F., Helfand, D. J., & **Ransom, S. M.** 2004, “X-Ray, Radio, and Optical Observations of the Putative Pulsar in the Supernova Remnant CTA 1”, *ApJ*, 612, 398
- Hessels, J. W. T., Roberts, M. S. E., **Ransom, S. M.**, Kaspi, V. M., Romani, R. W., Ng, C.-Y., Freire, P. C. C., & Gaensler, B. M. 2004, “Observations of PSRJ2021+3651 and its X-Ray Pulsar Wind Nebula G75.2+0.1”, *ApJ*, 612, 389
- Ransom, S. M.**, Kaspi, V. M., Ramachandran, R., Demorest, P., Backer, D. C., Pfahl, E. D., Ghigo, F. D., & Kaplan, D. L. 2004, “Green Bank Telescope Measurement of the Systemic Velocity of the Double Pulsar Binary J0737–3039 and Implications for Its Formation”, *ApJ*, 609, L71
- Ibrahim, A. I., et al. 2004, “Discovery of a Transient Magnetar: XTE J1810–197”, *ApJ*, 609, L21
- Freire, P. C., Gupta, Y., **Ransom, S. M.**, & Ishwara-Chandra, C. H. 2004, “Giant Metrewave Radio Telescope Discovery of a Millisecond Pulsar in a Very Eccentric Binary System”, *ApJ*, 606, L53
- Jenet, F. A., & **Ransom, S. M.** 2004, “The geometry of the double-pulsar system J0737–3039 from systematic intensity variations”, *Nature*, 428, 919
- Ransom, S. M.**, Stairs, I. H., Backer, D. C., Greenhill, L. J., Bassa, C. G., Hessels, J. W. T., & Kaspi, V. M. 2004, “Green Bank Telescope Discovery of Two Binary Millisecond Pulsars in the Globular Cluster M30”, *ApJ*, 604, 328
- Roberts, M. S. E., Hessels, J. W. T., **Ransom, S. M.**, Kaspi, V. M., Freire, P. C. C., Crawford, F., & Lorimer, D. R. 2004, “PSR J2021+3651: a new γ -ray pulsar candidate”, *Advances in Space Research*, 33, 577
- Markwardt, C. B., **Ransom, S.**, Woods, P., Ibrahim, A., Kaspi, V., Kouveliotou, C., Roberts, M., & Swank, J. 2003, “XTE J1810–197 is Likely an Anomalous X-ray Pulsar”, *The Astronomer’s Telegram*, 188, 1
- Gotthelf, E. V., Halpern, J. P., Markwardt, C., Ibrahim, A. I., Roberts, M., **Ransom, S. M.**, & Woods, P. 2003, “CXOU J180951.1–194351 = RXTE J1810–197”, *IAU Circ.*, 8190, 2
- Ransom, S. M.**, Cordes, J. M., & Eikenberry, S. S. 2003, “A New Search Technique for Short Orbital Period Binary Pulsars”, *ApJ*, 589, 911

- Gavriil, F., **Ransom, S. M.**, Roberts, M. S. E., Kaspi, V. M., Gaensler, B. M., Murray, S. S., & Slane, P. O. 2003, “RXTE monitoring of the 65-ms X-ray pulsars PSR J1811–1925 in G11.2-0.3 and PSR J0205+6559 in 3C 58”, *JRASC*, 97, 213
- Roberts, M. S. E., Hessels, J. W. T., **Ransom, S. M.**, Kaspi, V. M., Freire, P. C. C., Crawford, F., & Lorimer, D. R. 2002, “PSR J2021+3651: A Young Radio Pulsar Coincident with an Unidentified EGRET γ -Ray Source”, *ApJ*, 577, L19
- Ransom, S. M.**, Eikenberry, S. S., & Middleditch, J. 2002, “Fourier Techniques for Very Long Astrophysical Time-Series Analysis”, *AJ*, 124, 1788
- Camilo, F., et al. 2002, “Discovery of Radio Pulsations from the X-Ray Pulsar J0205+6449 in Supernova Remnant 3C 58 with the Green Bank Telescope”, *ApJ*, 571, L41
- Ransom, S. M.**, Gaensler, B. M., & Slane, P. O. 2002, “A Deep Search for Pulsations from the Nearby Isolated Neutron Star RX J1856.5–3754”, *ApJ*, 570, L75
- Murray, S. S., Slane, P. O., Seward, F. D., **Ransom, S. M.**, & Gaensler, B. M. 2002, “Discovery of X-Ray Pulsations from the Compact Central Source in the Supernova Remnant 3C 58”, *ApJ*, 568, 226
- Murray, S. S., **Ransom, S. M.**, Juda, M., Hwang, U., & Holt, S. S. 2002, “Is the Compact Source at the Center of Cassiopeia A Pulsed?”, *ApJ*, 566, 1039
- Ransom, S. M.**, Greenhill, L. J., Herrnstein, J. R., Manchester, R. N., Camilo, F., Eikenberry, S. S., & Lyne, A. G. 2001, “A Binary Millisecond Pulsar in Globular Cluster NGC 6544”, *ApJ*, 546, L25
- Ransom, CPT S. M.**, & Grand, LTC F. J. 1999, “Un-masking the Q-36 Mask Angle: Finding Mortars in the Woods”, *Field Artillery*, Jan-Feb, 34
- Eikenberry, S. S., Fazio, G. G., & **Ransom, S. M.** 1998, “ROSAT Timing of the LMC Pulsar 0540–69”, *ApJ*, 492, 754
- Eikenberry, S. S., Fazio, G. G., **Ransom, S. M.**, Middleditch, J., Kristian, J., & Pennypacker, C. R. 1997, “High Time Resolution Infrared Observations of the Crab Nebula Pulsar and the Pulsar Emission Mechanism”, *ApJ*, 477, 465
- Eikenberry, S. S., Fazio, G. G., & **Ransom, S. M.** 1996, “An SSPM-Based High-Speed Near-Infrared Photometer for Astronomy”, *PASP*, 108, 939
- Eikenberry, S. S., Fazio, G. G., **Ransom, S. M.**, Middleditch, J., Kristian, J., & Pennypacker, C. R. 1996, “Infrared-to-Ultraviolet Wavelength-dependent Variations within the Pulse Profile Peaks of the Crab Nebula Pulsar”, *ApJ*, 467, L85
- Eikenberry, S. S., Fazio, G. G., & **Ransom, S. M.** 1995, “SSPM-based high-speed infrared photometer for astronomy”, *Proc. SPIE*, 2475, 210
- Ransom, S. M.**, Fazio, G. G., Eikenberry, S. S., Middleditch, J., Kristian, J., Hays, K., & Pennypacker, C. R. 1994, “High time resolution infrared observations of the Crab Nebula pulsar”, *ApJ*, 431, L43

Recent Invited Talks (Approximately 60 in the last 4 years)

- 2018 Jan, USNO Colloquium, Washington, D.C., “A Millisecond Pulsars in a Stellar Triple System: Testing the Strong Equivalence Principle”
- 2017 Jul, Fred Lo Symposium invited talk, Charlottesville, VA, “Fred Lo and the Origins (and Future of) NANOGrav”
- 2017 May, CIFAR Untangling the Cosmos Panel invited talk, Toronto, Canada, “Pulsars - Perfect Clocks for Physics”
- 2017 Apr, New York University, Abu Dhabi, UAE “Pulsars and Continuum Studies with the UAE 34-m”
- 2017 Mar, Canadian Institute for Advanced Research meeting, Lake Louise, AB “A Dozen Years of Timing Three Dozen Pulsars in a Globular Cluster”
- 2017 Mar, Perimeter Institute Colloquium, Waterloo, ON “Extraordinary Physics with Millisecond Pulsars”
- 2017 Feb, Ohio University Physics Colloquium, Athens, OH “Extraordinary Physics with Millisecond Pulsars”
- 2016 Nov, Institute for Advanced Study Colloquium, Princeton, NJ “Extraordinary Physics with Millisecond Pulsars”
- 2016 Nov, UVA Computer Science Seminar, Charlottesville, VA “The (obscure) Challenges of Next-Generation Pulsar Surveys”
- 2016 Nov, SE Region APS Meeting invited talk, Charlottesville, VA “The State of Gravitational Wave Detection with Pulsar Timing Arrays”
- 2016 Oct, Green Bank Observatory inauguration invited talk, Green Bank, WV “Tick-Tock, Tick-Tock! GBO and Cosmic Clocks”
- 2016 Oct, Breakthrough Listen meeting invited talk, Green Bank, WV “Pulsars and FRBs Commensal with Breakthrough Listen at GBT”
- 2016 Sep, Smithsonian Special Seminar, Cambridge, MA “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2016 Sep, VLGCMM16 Conference on Black Holes, plenary lecture, Mexico City, Mexico “Extraordinary Physics with Millisecond Pulsars”
- 2016 Aug, ASIAA Colloquium, Taipei, Taiwan “Extraordinary Physics with Millisecond Pulsars”
- 2016 Jul, ICHEP Meeting Special Session on GWs invited talk, Chicago, IL “The State of Gravitational Wave Detection with Pulsar Timing Arrays”
- 2016 Jul, Radio Futures II invited talk, Baltimore, MD “MeerKAT, FAST, and SKA1 for Pulsars”
- 2016 Jul, Laboratory and Astronomical Observations of Dense Matter meeting invited talk, Seattle, WA “Measuring NS Masses with Radio Pulsars”
- 2016 Jun, IPTA Student Workshop Keynote, Stellenbosch, SA “But wait! There’s more!: A Wealth of (non-PTA) Science from Millisecond Pulsars”
- 2016 Apr, COSMIC-LAB Meeting Invited Review, Bologna, IT “Millisecond Pulsars in Globular Clusters”
- 2016 Mar, Canadian Institute for Advanced Research meeting, Whistler, BC “NANOGrav 11-yr Dataset and New Shapiro Delay Results”
- 2016 Mar, U. Colorado Astro Colloquium, Boulder, CO “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2016 Jan, 227th AAS Meeting Special *Fermi* Session, Kissimmee, FL “Pulsar Riches from *Fermi*”
- 2015 Dec, US Radio/mm/sub-mm Science Futures meeting, Chicago, IL “The Physics of Pulsars: The Extreme Density Equation of State”

- 2015 Dec, Rice Univ. Physics/Astro Colloquium, Houston, TX “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 Oct, Northwestern Univ. Radio Astronomy Seminar Series “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 Sep, Caltech Astrophysics Colloquium, Pasadena, CA “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 Jun, Aspen Physics Center Colloquium, Aspen, CA “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 May, Carnegie Institute Colloquium, Pasadena, CA “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 May, UC Santa Cruz Astronomy Colloquium, Santa Cruz, CA “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 May, JPL Astrophysics Colloquium, Pasadena, CA “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2015 Apr, Stanford U. Astrophysics Colloquium, Palo Alto, CA, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2015 Jan, UC Berkeley Astronomy Colloquium, Berkeley, CA, “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2014 Nov, Hintze Lecture, Oxford Astrophysics, Oxford, UK, “Millisecond Pulsars, Magnetars, and Black Holes: The Wickedly Cool Stellar Undead”
- 2014 Nov, NOVA Colloquium Series in the Netherlands at Nijmegen, Amsterdam, Leiden, Groningen, & Dwingeloo (ASTRON), “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2014 Oct, Oxford e-Research Center Seminar, Oxford, UK, “Millisecond pulsars, basic physics, and their ridiculous data and computing challenges”
- 2014 Oct, Oxford Astrophysics Colloquium, Oxford, UK, “Nuclear Physics at Two Kiloparsecs: Measuring the Masses of Millisecond Pulsars”
- 2014 Oct, U. Leicester Astrophysics Seminar, Leicester, UK, “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2014 Oct, Liverpool John Moores Univ. Astrophysics Seminar, Liverpool, UK, “But wait! There’s more!: A Wealth of Science from Millisecond Pulsars”
- 2014 Jul, Benjamin Dean Lecture at the California Academy of Sciences, San Francisco, CA, “Black Holes, Magnetars and Millisecond Pulsars: The Wickedly Cool Stellar Undead”
- 2014 Jun, Pixar Studios Seminar, Emeryville, CA, “Black Holes, Magnetars and Millisecond Pulsars: The Wickedly Cool Stellar Undead”
- 2014 May, Frontiers of Neutron Star Astrophysics meeting, Ithaca, NY, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2014 May, Canadian Institute for Advanced Research meeting, Quebec City, QC, “A Millisecond Pulsar in a Stellar Triple System (and testing GR with neutron star – white dwarf systems)”
- 2014 May, Maryland Joint Space-Science Institute Colloquium, College Park, MD, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2014 Apr, John C. Wells Planetarium at JMU public talk, Harrisonburg, VA, “Pulsars, Magnetars, and Black Holes (oh my!): The Wickedly Cool Stellar Undead”
- 2014 Apr, James Madison University Physics Dept. Seminar, Harrisonburg, VA, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2014 Apr, Exascale Radio Astronomy, Monterey, CA, “The (obscene) Challenges of Next-Generation Pulsar Surveys”

- 2014 Mar, The Structure and Signals of Neutron Stars, Florence, Italy, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2014 Feb, Transformational Science with the SKA, Stellenbosch, SA, “Nuclear Physics at Two Kiloparsecs with Millisecond Pulsars”
- 2013 Dec, Pulsar Timing Array Session at Texas Symposium on Relativistic Astrophysics, Dallas, TX, “But Wait, There’s More!: ‘Secondary’ science from PTAs”
- 2013 Nov, Curtin University Astrophysics Colloquium, Perth, Australia, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 Nov, The Ephemeral Universe with Widefield Low Frequency Arrays, Perth, Australia, “The GBT 350 MHz Surveys”
- 2013 Nov, Univ. Wisconsin-Milwaukee Physics Colloquium, Milwaukee, WI, “Neutron Star Masses and Basic Physics Consequences”
- 2013 Oct, Stony Brook Univ. Physics Dept. Colloquium, Stony Brook, NY, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 Oct, Univ. New Mexico Physics Dept. Colloquium, Albuquerque, NM, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 Jun, U. California at Berkeley Theory Seminar, Berkeley, CA, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 Jun, Miller Institute Interdisciplinary Symposium keynote speaker, Berkeley, CA, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 May, Astro Colloquium, Los Alamos National Lab, Los Alamos, NM, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 May, Latest Results from the Neutron Star Laboratory meeting, Amsterdam, Netherlands, “Searching for pulsars in the likeliest places”
- 2013 May, Cambridge Univ Institute of Astronomy, Cambridge, UK, “Detecting Gravitational Waves (and doing other cool physics) with Millisecond Pulsars”
- 2013 Apr, U. Chicago Physics Colloquium, Chicago, IL, “Basic(but cool!) Physics with Millisecond Pulsars”
- 2013 Apr, U. Texas at Brownsville Physics Colloquium, Brownsville, TX, “Neutron Star Masses and Basic Physics Consequences”
- 2013 Apr, Harvard Institute for Theory and Computation Colloquium, Cambridge, MA, “Neutron Star Masses and Basic Physics Consequences”

