

David J. Nice
Curriculum Vitae and Publications

Physics Department
Lafayette College
Easton, PA 18042
ORCID ID: 0000-0002-6709-2566

niced@lafayette.edu
<http://sites.lafayette.edu/niced>
office +1-610-330-5204

Positions Held:

Lafayette College
2024– Charles A. Dana Professor, Physics
2019–2024 Professor, Physics
2016–2024 Department Head, Physics
2010–2019 Associate Professor, Physics
Bryn Mawr College
2005–2010 Visiting Assistant Professor, Physics
Princeton University
1997–2005 Assistant Professor, Physics
1996–1997 Lecturer, Physics
National Radio Astronomy Observatory
1993–1996 Jansky Postdoctoral Fellow
University of Virginia
1995 Lecturer, Astronomy
Princeton University
1992–1993 Research Associate, Physics

Education:

1992 Ph.D., Physics, Princeton University
Dissertation: *Two High-Sensitivity Pulsar Searches* (doi:10.5281/zenodo.49375)
Supervisor: *Prof. Joseph H. Taylor, Jr.*
1989 M.A., Physics, Princeton University
1987 B.S. with Honor, Physics, California Institute of Technology

Research Interests:

Radio telescope observations of pulsars
Tests of relativistic gravity
Binary star evolution
Characteristics and physics of neutron stars
Radio telescope instrumentation, software, and data analysis
Gravitational waves at nanohertz frequencies (NANOGrav collaboration)

Selected Service Work (at Lafayette College unless otherwise indicated):

- 2024 Member, Working at Lafayette Strategic Plan Working Group
- 2023– Member, Promotion, Tenure, and Review Committee
- 2023 Co-chair, Vice President for Student Life Search Committee
- 2023 Chair, Physics Visiting Faculty Search Committee (two positions)
- 2022–2023 Member, Faculty Academic Policy Committee
- 2022–2023 Faculty Associate, Trustees Committee on Student Life, Lafayette Coll.
- 2022 Chair, Physics Visiting Faculty Search Committee (two positions)
- 2021– Member, Management Team, NANOGrav collaboration
- 2021–2022 Alternate Faculty Associate, Trustees Committee on Student Life
- 2020–2021 Member, Faculty Academic Policy Committee
- 2011–2020 Chair, Pulsar Timing Working Group, NANOGrav collaboration
- 2018–2019 Chair, Academic Research Committee
- 2016–2019 Member, Academic Research Committee
- 2019 Organizer, NANOGrav Timing Working Group Workshop (held at Lafayette)
- 2019 Chair, Physics Faculty Search Committee
- 2019 Chair, Physics Visiting Faculty Search Committee
- 2017 Organizer, NANOGrav Collaboration Workshop (held at Lafayette)
- 2017 Honors Examiner, Oberlin College Physics Department
- 2017 Chair, Physics Faculty Search Committee (two positions)
- 2017 Chair, Physics Visiting Faculty Search Committee
- 2015 Member, Math Visiting Faculty Search Committee
- 2014–2015 Chair, Information Technology & Library Committee
- 2013–2015 Member, Information Technology & Library Committee
- 2014 Chair, Scientific Org. Committee, Int'l Pulsar Timing Array meeting, Banff
- 2013–2014 Member, Electrical & Computer Engineering Faculty Search Committee
- 2011–2012 Chair, Ad Hoc Publication Policy Group, NANOGrav collaboration
- 2011 Special Session Organizer, American Astronomical Society Meeting, Seattle
- 2008–2011 Chair, Student Observing Support Committee, Nat'l Radio Astronomy Obs.
- 2004–2011 Member, Student Observing Support Committee, Nat'l Radio Astronomy Obs.
- 2008 Session Organizer, Texas Symposium on Relativistic Astrophysics, Vancouver
- 2008 Scientific Organizing Committee, Int'l Pulsar Timing Array Meeting, Arecibo, PR
- 2005–2007 Member, Users Committee, National Astronomy and Ionosphere Center
- 2003–2005 Member, Committee on Undergraduate Life, Princeton University
- 2003 Organizer, Baseband Recorder Workshop, IAU Symposium 218, Sydney
- 2002 Organizer, Radio Pulsars Conference, Chania, Crete
- 2001 Chair, Users Committee, National Radio Astronomy Observatory
- 2001 Honors Examiner, Oberlin College Physics Department
- 1998–2004 Academic Adviser & Faculty Fellow, Mathey College, Princeton University
- 1998–2001 Member, Users Committee, National Radio Astronomy Observatory

Publications

Books Edited:

1. **Radio Pulsars**

M. Bailes, D. J. Nice, and S. E. Thorsett, editors
2003 (San Francisco: Astronomical Society of the Pacific)
ISBN: 1-58381-151-6

Peer-Reviewed Publications:

1. **The NANOGrav 15 yr Data Set: Running of the Spectral Index**

G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal, accepted December 2024
arXiv:2408.10166

2. **The NANOGrav 15 yr Data Set: Looking for Signs of Discreteness in the Gravitational-wave Background**

G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal, accepted November 2024
arXiv:2404.07020

3. **Exploring Pulsar Timing precision: A Comparative Study of Polarization Calibration Methods for NANOGrav Data from the Green Bank Telescope**

L. Dey *et al.* (NANOGrav timing group)
Astrophysical Journal, accepted October 2024
arXiv:2406.13463

4. **The NANOGrav 15-year Gravitational-Wave Background Methods**

A. D. Johnson *et al.* (NANOGrav collaboration)
Physical Review D, 109, 103012 (2024)
doi:10.1103/PhysRevD.109.103012, arXiv:2306.16223

5. **The NANOGrav 15 yr Data Set: Chromatic Gaussian Process Noise Model for Six Pulsars**

B. Larsen *et al.* (NANOGrav timing group and others)
Astrophysical Journal, 972, 49 (2024)
doi:10.3847/1538-4357/ad5291, arXiv:2405.14941

6. **Comparing Recent PTA Results on the Nanohertz Stochastic Gravitational Wave Background**

G. Agazie *et al.* (International Pulsar Timing Array)
Astrophysical Journal, 966, 105 (2024)
doi:10.3847/1538-4357/ad36be, arXiv:2309.00693

7. **The NANOGrav 12.5-year Data Set: Dispersion Mis-Estimation with Varying Bandwidths**

S. V. Sosa Fiscella *et al.* (NANOGrav Noise Budget and Timing Working Groups)
Astrophysical Journal, 966, 95 (2024)
doi:10.3847/1538-4357/ad2858, arXiv:2307.13248

8. **An Unusual Pulse Shape Change Event in PSR J1713+0747 Observed with the Green Bank Telescope and CHIME**

R. Jennings *et al.* (NANOGrav Noise Budget and Timing Working Groups; CHIME/Pulsar)
Astrophysical Journal, 964, 179 (2024)
doi:10.3847/1538-4357/ad2930, arXiv:2210.12266

9. **The NANOGrav 15-year Data Set: Search for Transverse Polarization Modes in the Gravitational-Wave Background**
G. Agazie *et al.* (NANOGrav Collaboration)
Astrophysical Journal Letters, 964, L14 (2024)
doi:10.3847/2041-8213/ad2a51, arXiv:2310.12138
10. **The NANOGrav 12.5-year data set: A Computationally Efficient Eccentric Binary Search Pipeline and Constraints on an Eccentric Supermassive Binary in 3C 66B**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal, 963, 144 (2024)
doi:10.3847/1538-4357/ad1f61, arXiv:2309.17438
11. **The NANOGrav 12.5-year Data Set: Search for Gravitational Wave Memory**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal, 963, 61 (2024)
doi:10.3847/1538-4357/ad0726, arXiv:2307.13797
12. **How to Detect an Astrophysical Nanohertz Gravitational Wave Background**
B. Bécsy *et al.* (NANOGrav collaboration)
Astrophysical Journal, 959, 9 (2023)
doi:10.3847/1538-4357/ad09e4, arXiv:2309.04443
13. **The NANOGrav 15-year Data Set: Search for Anisotropy in the Gravitational-Wave Background**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 956, L3 (2023)
doi:10.3847/2041-8213/acf4fd, arXiv:2306.16221
14. **The NANOGrav 15-year Data Set: Constraints on Supermassive Black Hole Binaries from the Gravitational Wave Background**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 952, L37 (2023)
doi:10.3847/2041-8213/ace18b, arXiv:2306.16220
15. **The NANOGrav 15-year data set: Bayesian Limits on Gravitational Waves from Individual Supermassive Black Hole Binaries**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L50 (2023)
doi:10.3847/2041-8213/ace18a, arXiv:2306.16222
16. **The NANOGrav 12.5-year data set: Bayesian Limits on Gravitational Waves from Individual Supermassive Black Hole Binaries**
Z. Arzoumanian *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L28 (2023)
doi:10.3847/2041-8213/acdbc7, arXiv:arXiv:2301.03608
17. **The NANOGrav 15-year Data Set: Evidence for a Gravitational-Wave Background**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L8, (2023)
doi:10.3847/2041-8213/acdac6, arXiv:2306.16213
18. **The NANOGrav 15-year Data Set: Observations and Timing of 68 Millisecond Pulsars**
G. Agazie *et al.* (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L9 (2023)
doi:10.3847/2041-8213/acda9a, arXiv:2306.16217

19. **The NANOGrav 15-year Data Set: Detector Characterization and Noise Budget**
G. Agazet al. (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L10 (2023)
doi:10.3847/2041-8213/acda88, arXiv:2306.16218
20. **The NANOGrav 15-year Data Set: Search for Signals from New Physics**
A. Afzaet al. (NANOGrav collaboration)
Astrophysical Journal Letters, 951, L11 (2023)
doi:10.3847/2041-8213/acdc91, arXiv:2306.16219
21. **Searching for continuous Gravitational Waves in the second data release of the International Pulsar Timing Array**
M. Falxa et al. (International Pulsar Timing Array collaboration)
Monthly Notices of the Royal Astronomical Society, 521, 5077 (2023)
doi:10.1093/mnras/stad812, arXiv:2303.10767
22. **Bayesian Solar Wind Modeling with Pulsar Timing Arrays**
J. S. Hazboun et al. (NANOGrav Timing and Noise Budget Working Groups)
Astrophysical Journal, 929, 39 (2022)
doi:10.3847/1538-4357/ac5829, arXiv:2111.09361
23. **The NANOGrav 12.5-year Data Set: Polarimetry, Rotation Measures, and Galactic Magnetic Field Strengths from NANOGrav Observations with the Green Bank Telescope**
H. M. Wahl et al. (NANOGrav Timing Working Group)
Astrophysical Journal, 168, 23 (2022)
doi:10.3847/1538-4357/ac4045, arXiv:2104.05723
24. **The International Pulsar Timing Array second data release: Search for an isotropic Gravitational Wave Background**
J. Antoniadis et al. (International Pulsar Timing Array collaboration)
Monthly Notices of the Royal Astronomical Society, 510, 4873 (2022)
doi:10.1093/mnras/stab3418, arXiv:2201.03980
25. **Searching For Gravitational Waves From Cosmological Phase Transitions With The NANOGrav 12.5-year dataset**
Z. Arzoumanian et al. (NANOGrav collaboration)
Physical Review Letters, 127, 251302 (2021)
doi:10.1103/PhysRevLett.127.251302, arXiv:2104.13930
26. **The NANOGrav 12.5-year Data Set: Search for Non-Einsteinian Polarization Modes in the Gravitational-Wave Background**
Z. Arzoumanian et al. (NANOGrav collaboration)
Astrophysical Journal Letters, 923, L22 (2021)
doi:10.3847/2041-8213/ac401c, arXiv:2109.14706
27. **The NANOGrav 12.5-year Data Set: Monitoring Interstellar Scattering Delays**
J. E. Turner et al.
Astrophysical Journal, 917, 10 (2021)
doi:10.3847/1538-4357/abfafa, arXiv:2012.09884
28. **Refined Mass and Geometric Measurements of the High-Mass PSR J0740+6620**
E. Fonseca et al.
Astrophysical Journal Letters, 915, L12 (2021)
doi:10.3847/2041-8213/ac03b8, arXiv:2104.00880

29. **The NANOGrav 11yr Data Set: Limits on Supermassive Black Hole Binaries in Galaxies within 500Mpc**
Z. Arzoumanian *et al.*
Astrophysical Journal, 914, 121 (2021)
doi:10.3847/1538-4357/abfcd3, arXiv:2101.02716
30. **Astrophysics Milestones for Pulsar Timing Array Gravitational-wave Detection**
N. S. Pol *et al.*
Astrophysical Journal Letters, 911, L34, (2021)
doi:10.3847/2041-8213/abf2c9, arXiv:2010.11950
31. **The NANOGrav 12.5-year Data Set: Observations and Narrowband Timing of 47 Millisecond Pulsars**
M. F. Alam *et al.*
Astrophysical Journal Supplement Series, 252, 4 (2021)
doi:10.3847/1538-4365/abc6a0, arXiv:2005.06490
32. **The NANOGrav 12.5-year Data Set: Wideband Timing of 47 Millisecond Pulsars**
M. F. Alam *et al.*
Astrophysical Journal Supplement Series, 252, 5 (2021)
doi:10.3847/1538-4365/abc6a1, arXiv:2005.06495
33. **The NANOGrav 12.5-year Data Set: Search for an Isotropic Stochastic Gravitational-Wave Background**
Z. Arzoumanian *et al.*
Astrophysical Journal Letters, 905, L34 (2020)
doi:10.3847/2041-8213/abd401, arXiv:2009.04496
34. **Multi-Messenger Gravitational Wave Searches with Pulsar Timing Arrays: Application to 3C66B Using the NANOGrav 11-year Data Set**
Z. Arzoumanian *et al.*
Astrophysical Journal, 900, 102 (2020)
doi:10.3847/1538-4357/ababa1, arXiv:2005.07123
35. **Modeling the Uncertainties of Solar System Ephemerides for Robust Gravitational-wave Searches with Pulsar-timing Arrays**
M. Vallisneri *et al.*
Astrophysical Journal, 893, 112 (2020)
doi:10.3847/1538-4357/ab7b67, arXiv:2001.00595
36. **The NANOGrav 11-year Data Set: Constraints on Planetary Masses Around 45 Millisecond Pulsars**
E. A. Behrens *et al.*
Astrophysical Journal Letters, 893, L8 (2020)
doi:10.3847/2041-8213/ab8121, arXiv:1912.00482
37. **The NANOGrav 11-Year Data Set: Evolution of Gravitational Wave Background Statistics**
J. Hazboun *et al.*
Astrophysical Journal, 890, 108 (2020)
doi:10.3847/1538-4357/ab68db, arXiv:1909.08644
38. **The NANOGrav 11-Year Data Set: Limits on Gravitational Wave Memory**
K. Aggarwal *et al.*
Astrophysical Journal, 889, 38 (2020)
doi:10.3847/1538-4357/ab6083, arXiv:1911.08488

39. **A very massive neutron star: relativistic Shapiro delay measurements of PSR J0740+6620**
H. T. Cromartie *et al.*
Nature Astronomy, 4, 72 (2020)
doi:10.1038/s41550-019-0880-2, arXiv:1904.06759
40. **A Pulsar-based Timescale from the International Pulsar Timing Array**
G. Hobbs *et al.*
Monthly Notices of the Royal Astronomical Society, 491, 5951 (2020)
doi:10.1093/mnras/stz3071, arXiv:1910.13628
41. **The International Pulsar Timing Array: Second Data Release**
B. B. P. Perera *et al.*
Monthly Notices of the Royal Astronomical Society, 490, 4666 (2019)
doi:10.1093/mnras/stz2857, arXiv:1909.04534
42. **The NANOGrav 11-Year Data Set: Limits on Gravitational Waves from Individual Supermassive Black Hole Binaries**
K. Aggarwal *et al.*
Astrophysical Journal, 880, 116 (2019)
doi:10.3847/1538-4357/ab2236, arXiv:1812.11585
43. **High-Precision X-ray Timing of Three Millisecond Pulsars with NICER: Stability Estimates and Comparison with Radio**
J. S. Deneva *et al.*
Astrophysical Journal, 874, 160 (2019)
doi:10.3847/1538-4357/ab0966, arXiv:1902.07130
44. **The NANOGrav 12.5-Year Data Set: The Frequency Dependence of Pulse Jitter in Precision Millisecond Pulsars**
M. Lam *et al.*
Astrophysical Journal, 872, 193 (2019)
doi:10.3847/1538-4357/ab01cd, arXiv:1809.03058
45. **The NANOGrav 11-year Data Set: Solar Wind Sounding Through Pulsar Timing**
D. R. Madison *et al.*
Astrophysical Journal, 872, 150 (2019)
doi:10.3847/1538-4357/ab01fd, arXiv:1808.07078
46. **PSR J2234+0611: A New Laboratory for Stellar Evolution**
K. Stovall *et al.*
Astrophysical Journal, 870, 74 (2019)
doi:10.3847/1538-4357/aa37d, arXiv:1809.05064
47. **Tests of Gravitational Symmetries with Pulsar Binary J1713+0747**
W. W. Zhu *et al.*
Monthly Notices of the Royal Astronomical Society, 482, 3249 (2019)
doi:10.1093/mnras/sty2905, arXiv:1802.09206
48. **Studying the Solar System with the International Pulsar Timing Array**
R. N. Caballero *et al.*
Monthly Notices of the Royal Astronomical Society, 481, 5501 (2018)
doi:10.1093/mnras/sty2632, arXiv:1809.10744
49. **The NANOGrav 11-year Data Set: Pulse Profile Variability**
P. R. Brook *et al.*
Astrophysical Journal, 868, 122 (2018)
doi:10.3847/1538-4357/aae9e3, arXiv:1810.08269

50. **A VLBI Distance and Transverse Velocity for PSR B1913+16**
A. T. Deller, J. M. Weisberg, D. J. Nice, and S. Chatterjee
Astrophysical Journal, 862, 139 (2018)
doi:10.3847/1538-4357/aacf95, arXiv:1806.10265
51. **The NANOGrav Eleven-Year Data Set: Polarimetry and Pulse Microcomponents**
P. Gentile *et al.*
Astrophysical Journal, 862, 47 (2018)
doi:10.3847/1538-4357/aac9c9, arXiv:1807.00708
52. **A Second Chromatic Timing Event of Interstellar Origin toward PSR J1713+0747**
M. Lam *et al.*
Astrophysical Journal, 861, 132 (2018)
doi:10.3847/1538-4357/aac770, arXiv:1712.03651
53. **The NANOGrav 11-Year Data Set: Pulsar-Timing Constraints on the Stochastic Gravitational-Wave Background**
Z. Arzoumanian *et al.*
Astrophysical Journal, 859, 47 (2018)
doi:10.3847/1538-4357/aabd3b, arXiv:1801.02617
54. **The NANOGrav 11-Year Data Set: High-Precision Timing of 45 Millisecond Pulsars**
Z. Arzoumanian *et al.*
Astrophysical Journal Supplement Series, 235, 37 (2018)
doi:10.3847/1538-4365/aab5b0, arXiv:1801.01837
55. **The NANOGrav Nine-Year Data Set: Measurement and Interpretation of Variations in Dispersion Measures**
M. Jones *et al.*
Astrophysical Journal, 841, 125 (2017)
doi:10.3847/1538-4357/aa73df, arXiv:1612.03187
56. **The NANOGrav Nine-Year Data Set: Excess Noise in Millisecond Pulsar Arrival Times**
M. Lam *et al.*
Astrophysical Journal, 834, 35 (2017)
doi:10.3847/1538-4357/834/1/35, arXiv:1610.01731
57. **The NANOGrav Nine-Year Data Set: Mass and Geometric Measurements of Binary Millisecond Pulsars**
E. Fonseca *et al.*
Astrophysical Journal, 832, 167 (2016)
doi:10.3847/0004-637X/832/2/167, arXiv:1603.00545
58. **PSR J1024–0719: A Millisecond Pulsar in an Unusual Long-Period Orbit**
D. Kaplan *et al.*
Astrophysical Journal, 826, 86 (2016)
doi:10.3847/0004-637X/826/1/86, arXiv:1604.00131
59. **The NANOGrav Nine-Year Data Set: Limits on the Isotropic Stochastic Gravitational Wave Background**
Z. Arzoumanian *et al.*
Astrophysical Journal, 821, 13 (2016)
doi:10.3847/0004-637X/821/1/13, arXiv:1508.03024

60. **From Spin Noise to Systematics: Stochastic Processes in the First International Pulsar Timing Array Data Release**
L. Lentati *et al.*
Monthly Notices of the Royal Astronomical Society, 458, 2161 (2016)
doi:10.1093/mnras/stw395, arXiv:1602.05570
61. **The International Pulsar Timing Array: First Data Release**
J. P. W. Verbiest *et al.*
Monthly Notices of the Royal Astronomical Society, 458, 1267 (2016)
doi:10.1093/mnras/stw347, arXiv:1602.03640
62. **The NANOGrav Nine-Year Data Set: Noise Budget for Pulsar Arrival Times on Intraday Timescales**
M. Lam *et al.*
Astrophysical Journal, 819, 155 (2016)
doi:10.3847/0004-637X/819/2/155, arXiv:1512.08326
63. **The NANOGrav Nine-Year Data Set: Monitoring Interstellar Scattering Delays**
L. Levin *et al.*
Astrophysical Journal, 818, 166 (2016)
doi:10.3847/0004-637X/818/2/166, arXiv:1601.04490
64. **The NANOGrav Nine-Year Data Set: Astrometric Measurements of 37 Millisecond Pulsars**
A. Matthews *et al.*
Astrophysical Journal, 818, 92 (2016)
doi:10.3847/0004-637X/818/1/92, arXiv:1509.08982
65. **The NANOGrav Nine-Year Data Set: Observations, Arrival Time Measurements, and Analysis of 37 Millisecond Pulsars**
Z. Arzoumanian *et al.*
Astrophysical Journal, 813, 65 (2015)
doi:10.1088/0004-637X/813/1/65, arXiv:1505.07540
66. **NANOGrav Constraints on Gravitational Wave Bursts with Memory**
Z. Arzoumanian *et al.*
Astrophysical Journal, 810, 150 (2015)
doi:10.1088/0004-637X/810/2/150, arXiv:1501.05343
67. **Testing Theories of Gravitation Using 21-Year Timing of Pulsar Binary J1713+0747**
W. W. Zhu *et al.*
Astrophysical Journal, 809, 41 (2015)
doi:10.1088/0004-637X/809/1/41, arXiv:1504.00662
68. **The Binary Companion of Young, Relativistic Pulsar J1906+0746**
J. van Leeuwen *et al.*
Astrophysical Journal, 798, 118 (2015)
doi:10.1088/0004-637X/798/2/118, arXiv:1411.1518
69. **Gravitational Waves from Individual Supermassive Black Hole Binaries in Circular Orbits: Limits from the North American Nanohertz Observatory for Gravitational Waves**
Z. Arzoumanian *et al.*
Astrophysical Journal, 794, 141 (2014)
doi:10.1088/0004-637X/794/2/141, arXiv:1404.1267

70. **Arecibo Pulsar Survey Using ALFA. III. Precursor Survey and Population Synthesis**
J. K. Swiggum *et al.*
Astrophysical Journal, 787, 137 (2014)
doi:10.1088/0004-637X/787/2/137, arXiv:1405.7953
71. **Timing and Interstellar Scattering of 35 Distant Pulsars Discovered in the PALFA Survey**
D. J. Nice *et al.*
Astrophysical Journal, 772, 50 (2013)
doi:10.1088/0004-637X/772/1/50, arXiv:1304.7370
72. **Limits on the Stochastic Gravitational Wave Background from the North American Nanohertz Observatory for Gravitational Waves**
P. Demorest *et al.*
Astrophysical Journal, 762, 94 (2013)
doi:10.1088/0004-637X/762/2/94, arXiv:1201.6641
73. **Time Correlated Structure in Spin Fluctuations in Pulsars**
S. Price, B. Link, S. N. Shore, & D. J. Nice
Monthly Notices of the Royal Astronomical Society, 426, 2507 (2012)
doi:10.1111/j.1365-2966.2012.21863.x, arXiv:1208.0807
74. **Four Highly Dispersed Millisecond Pulsars Discovered in the Arecibo PALFA Galactic Plane Survey**
F. Crawford *et al.*
Astrophysical Journal, 757, 90 (2012)
doi:10.1088/0004-637X/757/1/90, arXiv:1208.1273
75. **Two Millisecond Pulsars Discovered by the PALFA Survey and a Shapiro Delay Measurement**
J. S. Deneva *et al.*
Astrophysical Journal, 757, 89 (2012)
doi:10.1088/0004-637X/757/1/89, arXiv:1208.1228
76. **High-Precision Timing of Five Millisecond Pulsars: Space Velocities, Binary Evolution, and Equivalence Principles**
M. E. Gonzalez, I. H. Stairs, R. D. Ferdman, P. C. C. Freire, D. J. Nice,
P. B. Demorest, S. M. Ransom, R. N. Manchester, G. Hobbs, and A. G. Lyne
Astrophysical Journal, 743, 102 (2011)
doi:10.1088/0004-637X/743/2/102, arXiv:1109.5638
77. **Arecibo PALFA Survey and Einstein@Home: Binary Pulsar Discovery by Volunteer Computing**
B. Knispel *et al.*
Astrophysical Journal (Letters), 732, L1-L5 (2011)
doi:10.1088/2041-8205/732/1/L1, arXiv:1102.5340
78. **On the Nature and Evolution of the Unique Binary Pulsar PSR J1903+0327**
P. C. C. Freire *et al.*
Monthly Notices of the Royal Astronomical Society, 412, 2763-2780 (2011)
doi:10.1111/j.1365-2966.2010.18109.x, arXiv:1011.5809
79. **Timing Measurements of the Relativistic Binary Pulsar PSR B1913+16**
J. M. Weisberg, D. J. Nice, and J. H. Taylor
Astrophysical Journal, 722, 1030-1034 (2010)
doi:10.1088/0004-637X/722/2/1030, arXiv:1011.0718

80. **Pulsar Discovery by Global Volunteer Computing**
B. Knispel *et al.*
Science, 329, 1305 (2010)
doi:10.1126/science.1195253, arXiv:1008.2172
81. **Measuring the Mass of Solar System Planets Using Pulsar Timing**
D. J. Champion *et al.*
Astrophysical Journal (Letters), 720, L201-L205 (2010)
doi:10.1088/2041-8205/720/2/L201, arXiv:1008.3607
82. **A Precise Mass Measurement of the Intermediate-Mass Binary Pulsar PSR J1802-2124**
R. D. Ferdman, I. H. Stairs, M. Kramer, M. A. McLaughlin, D. R. Lorimer, D. J. Nice, R. N. Manchester, G. Hobbs, A. G. Lyne, F. Camilo, A. Possenti, P. B. Demorest, I. Cognard, G. Desvignes, G. Theureau, A. Faulkner, and D. C. Backer
Astrophysical Journal, 711, 764-771 (2010)
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