

David L. Kaplan

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Research Interests:

- Pulsars, young neutron stars, and magnetars
- White dwarfs & binaries
- Multi-wavelength/multi-messenger transients
- Radio, optical, X-ray instrumentation & signal processing
- 197 refereed papers with 6824 citations and H-index of 43 (as of 28 August 2018)

Employment:

- Associate Professor, Department of Physics, University of Wisconsin-Milwaukee (2014-)
- Assistant Professor, Department of Physics, University of Wisconsin-Milwaukee (2010-2014)
- Assistant Professor L/T, Department of Astronomy, University of Wisconsin-Madison (2010-)
- Hubble Postdoctoral Fellow, UCSB Department of Physics (2008-2010)
- Hubble Postdoctoral Fellow, MIT Kavli Institute (2007-2008)
- Pappalardo Postdoctoral Fellow, MIT Department of Physics (2004-2007)

Education:

- Ph.D. in Astrophysics, California Institute of Technology, Pasadena, CA USA (2004)
 - Thesis title: *Neutron Star Diversity: Nearby Thermally Emitting Neutron Stars and the Compact Central Objects in Supernova Remnants*
 - Advisor: Prof. S. R. Kulkarni
- B.S. in Applied & Engineering Physics (Magna cum Laude with Honors), Cornell University, Ithaca, NY USA (1999)

Honors & Awards:

- Research Corporation Scialog Time Domain Astrophysics Fellow (2015-2016)
- Milton and Francis Clauser Doctoral Dissertation Prize (Caltech; 2004)
- Hertz Foundation Fellow (1999-2004)
- Hartmann Award for Experimental Physics (Cornell; 1999)
- Goldwater Fellow (1997-1999)

Grants & Proposals:

- Senior Investigator on NSF Physics Frontier Center for the North American Nanohertz Observatory for Gravitational Waves (\$14.5M, 2015-2020)
- PI on 3 NSF proposals (\$265k: 2013-2016; \$250k: 2014-2016, \$490k: 2018-2021)
- Co-PI on 3 NSF proposal (\$350k: 2010-2013; \$500k: 2018-2021; \$970k: 2018-2019)
- Co-I on NSF Partnership in International Research and Education (PIRE) proposal (\$4.5M, 2015-2020)
- PI on 5 Chandra proposals (total 243 ksec)
- PI on 5 XMM proposals (total 250 ksec)
- PI on multiple Keck, Magellan, and Gemini proposals
- PI on 4 HST proposals (total 50 orbits)
- PI on 1 Fermi proposal (total \$51k)
- Co-I on 3 Chandra Large Proposals

Service & Outreach:

- North American Nanohertz Observatory for Gravitational Waves (NANOGrav) Associate Member: 2014-2015; Full Member: 2016-
- Peer review: NASA Astrophysics Data Analysis Program (ADAP; 2016)
- Peer reviewer: Hubble Space Telescope (2013, 2015)
- Peer reviewer: National Optical Astronomical Observatory (2015-)
- Peer reviewer: Green Bank Telescope, Very Large Array (2006-2007; 2013-2015)
- Peer reviewer: Chandra X-ray Observatory (2007, 2010, 2012, 2014)
- Peer review: NASA Astrophysics Theory Program (ATP; 2011)
- Co-Sponsor: “AAS High Energy Astrophysics Division (HEAD)” special session “Transient Astronomy in the Advanced LIGO Era: Electromagnetic Counter-parts to Gravitational-Wave Signals” (2011)
- Large Scale Synoptic Telescope (LSST) Transient Science Collaboration member (2011-)
- Scientific Organizing Committee: “Gravitational Wave Physics & Astronomy” (GWPAW; 2011)
- Murchison Widefield Array: Chair, Transient Science Team (2010-); Transient Science Team; Science/Technical Alignment Group (2007-); Project Scientist (2016-2017)
- Australia SKA Pathfinder (ASKAP) Variables and Slow Transients (VAST) collaboration work-group 6 leader (2009-2017); VAST Co-PI (2017-)
- Peer reviewer: Suzaku X-ray Observatory (2009)
- Constellation-X Facility Science Team Science Panel (2006)
- Peer reviewer: Astrophysical Journal, Astrophysical Journal Letters, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society (1999-)
- Lead, MakerFaire Milwaukee exhibit, 2016, 2017
- Advisor, UWM Astronomy Club, 2010-
- Advisor, UWM Students for the Exploration and Development of Space Club, 2011-
- Faculty Mentor, UWM Wisconsin Louis Stokes Alliance For Minority Participation
- Multiple Milwaukee Astronomical Society/Wehr Astronomical Society presentations
- Multiple presentation at Milwaukee High Schools

Invited Conference Talks:

- Invited panelist at 2018 Summer AAS meeting on Multi-Messenger Astrophysics, June, 2018
- Invited talk at Capitol Chats III, August, 2017
- Invited talk at American Physical Society Division of Plasma Physics conference, October 2016
- Organizer of Pulsars and Transients session/Summary talk at U.S. Radio/Millimeter/Submillimeter Science Futures II, Baltimore, MD, August 2016
- Invited talk at Ninth Harvard-Smithsonian Conference on Theoretical Astrophysics, “The Transient Sky”, Boston, MA, May 2016
- Invited talk at “14th Marcel Grossman Meeting” session on “Double Neutron Stars and Neutron Star-White Dwarf Binaries”
- Invited talk at “Second Annual GMT Science Meeting on Time-Domain Astrophysics”, Washington, DC, October 2014
- Review talk at “Physics of Neutron Stars”, St. Petersburg, Russia, July 2014
- Invited talk at “2nd Radio and Antenna Days of the Indian Ocean”, Mauritius, April 2014
- Invited talk at “Exascale Radio Astronomy”, Monterey, CA March 2014
- Invited talk at “Latest Results from the Neutron Star Laboratory”, Amsterdam, Netherlands, May 2013
- Invited talk at “13th Marcel Grossman Meeting” session on “Origin and physics of Soft Gamma-ray Repeaters and Anomalous X-ray Pulsars,” Stockholm, Sweden, July 2012
- Invited talk at “Gravitational Wave Physics and Astronomy Meeting (GWPAW) 2012”, Hannover, Germany, June 2012
- Review talk at “Physics of Neutron Stars”, St. Petersburg, Russia, July 2011
- Invited talk at “AAS Workshop on Neutron Stars & Gravitational Waves,” Boston, MA, May 2011
- Invited talk at “Canadian Institute for Advanced Research Cosmology and Gravity Programme Meeting 2010”, Lake Louise, Canada, Feb 2010
- Solicited talk at “Neutron stars: timing in extreme environments”, Joint Discussion at the 2009 IAU General Assembly, Rio de Janeiro, Brazil, August 2009
- Invited talk at “Frontiers of Space Astrophysics: Neutron Stars & Gamma Ray Bursts; Recent Developments & Future Directions”, Cairo, Egypt, March 2009
- Invited talk at COSPAR 2008 Session E11: “Astrophysical Studies of Neutron Stars from Multi-wavelength Observations”, Montreal, Canada, July 2008
- Invited talk at “40 Years of Pulsars”, Montreal, Canada, August 2007 (published as *Nearby, Thermally Emitting Neutron Stars*, D. L. Kaplan 2008, in AIP Conference Series Vol. 983, ed. C. Bassa, Z. Wang, A. Cumming, V. Kaplan, 331–339)
- Invited talk at “Astrophysics of Compact Objects”, Huangshan, China, July 2007 (published as *Nearby, Thermally Emitting Neutron Stars*, D. L. Kaplan 2008, in AIP Conference Series Vol. 968, ed. Y.-F. Yuan, X.-D. Li, D. Lai, 129–136)
- Invited talk at “The Neutron Star Crust and Surface”, Institute for Nuclear Theory, Seattle, WA, June 2007
- Invited talk at “Neutron Star Populations”, Green Bank, WV, May 2007

- Invited talk at COSPAR 2006 Session E1.4: “New High-Energy Results on Supernova Remnants and Pulsar Wind Nebulae”, Beijing, China, July 2006
- Invited talk at “In Heaven and On Earth 2006: the Nuclear Equation of State in Astrophysics”, Montreal, Canada, July 2006
- Invited talks at “ECT International Workshop on Neutron Stars: Structure and Cooling”, Trento, Italy, September 2004
- Invited talk at “KIAS-APCTP International Symposium in Astro-Hadron Physics: Compact Stars: Quest For New States of Dense Matter”, Seoul, Korea, November 2003

Colloquia & Seminars:

- DESY, August 2018
- Purdue University, April 2018
- NRAO Socorro, April 2018
- Nijmegen University, February 2016
- ASTRON, February 2016
- Max Planck Institute for Radioastronomy, February 2016
- Princeton University/Institute for Advanced Study, March 2015
- Goddard Space Flight Center, November 2014
- Stanford/KIPAC, April 2014
- Harvard Physics Dept., March 2014
- Sydney University/SifA, March 2014
- University of California Santa Cruz, October 2013
- National Radio Astronomy Observatory, September 2013
- Marquette University, April 2013
- Michigan State University, November 2011
- University of Florida, October 2011
- Northwestern University, April 2011
- Brandeis University, April 2011
- Columbia University, October 2010
- University of Wisconsin Madison, April 2010
- University of Wisconsin Milwaukee, January 2009
- University of Utah, January 2008
- Penn State University, November 2007
- Netherlands Institute for Radio Astronomy (ASTRON), November 2007
- University of Sydney, April 2007
- McGill University, March 2007
- Harvard University, September 2006
- Naval Research Laboratory, November 2005
- University of Toronto, February 2005
- NRAO Charlottesville, April 2005

Refereed Publications:

1. Observations of Low-frequency Radio Emission from Millisecond Pulsars and Multipath Propagation in the Interstellar Medium
N. D. R. Bhat et al. (including **D. L. Kaplan**)
2018, *Astrophysical Journal Supplement*, 238, 1
2. The NANOGrav Eleven-year Data Set: High-precision timing of 45 Millisecond Pulsars
Z. A. Arzoumanian et al. (including **D. L. Kaplan**)
2018, *Astrophysical Journal*, in press, arXiv:1801.01837
3. An all-sky survey of circular polarization at 200 MHz
Lenc, E., T. Murphy, C. R. Lynch, D. L. Kaplan, & S. N. Zhang
2018, *Monthly Notices of the Royal Astronomical Society*, 478, 2835
4. A pilot survey for transients and variables with the Australian Square Kilometre Array Pathfinder
S. Bhandari et al. (including **D. L. Kaplan**)
2018, *Monthly Notices of the Royal Astronomical Society*, 478, 1784
5. The detectability of radio emission from exoplanets
C. R. Lynch, T. Murphy, E. Lenc, & **D. L. Kaplan**
2018, *Monthly Notices of the Royal Astronomical Society*, 478, 1763
6. Comparing Redundant and Sky-model-based Interferometric Calibration: A First Look with Phase II of the MWA
W. Li et al. (including **D. L. Kaplan**)
2018, *Astrophysical Journal*, 863, 170
7. Limits on radio emission from meteors using the MWA
X. Zhang et al. (including **D. L. Kaplan**)
2018, *Monthly Notices of the Royal Astronomical Society*, 477, 5167
8. Multi-Messenger Astrophysics: Harnessing the Data Revolution
G. Allen et al. (including **D. L. Kaplan**)
2018, arXiv:1807.04780 (workshop summary by the participants of the Cyberinfrastructure for Multi-Messenger Astrophysics NSF-funded Workshop Held on 23-24 May 2018 at the University of Maryland)
9. A Dense Companion to the Short-Period Millisecond Pulsar Binary PSR J0636+5128
D. L. Kaplan, K. Stovall, M. H. van Kerkwijk, C. Fremling, A. Istrate
2018, *Astrophysical Journal*, 864, 15

10. Binary Pulsar Distances and Velocities from Gaia Data Release 2
R. J. Jennings, **D. L. Kaplan**, S. Chatterjee, J. M. Cordes, & A. T. Deller
2018, *The Astrophysical Journal*, in press, arXiv:1806.06076
11. An upper-limit on the linear polarization fraction of the GW170817 radio continuum
A. Corsi, G. W. Hallinan, D. Lazzati, K. P. Mooley, E. J. Murphy, D. A. Frail, D. Carbone, **D. L. Kaplan**, T. Murphy, S. R. Kulkarni, & K. Hotokezaka
2018, *The Astrophysical Journal Letters*, 861, 10
12. The Green Bank North Celestial Cap Pulsar Survey. III. 45 New Pulsar Timing Solutions
R. S. Lynch, J. K. Swiggum, V. I. Kondratiev, **D. L. Kaplan** et al.
2018, *The Astrophysical Journal*, 864, 26
13. The NANOGrav 11 Year Data Set: Pulsar-timing Constraints on the Stochastic Gravitational-wave Background
Z. Arzoumanian et al. (including **D. L. Kaplan**)
2018, *The Astrophysical Journal*, 859, 47
14. A Turnover in the Radio Light Curve of GW170817
D. Dobie, **D. L. Kaplan**, T. Murphy, E. Lenc, K. P. Mooley, C. Lynch, A. Corsi, D. Frail, M. Kasliwal, & G. Hallinan
2018, *The Astrophysical Journal*, 858, L15
15. Reconciling optical and radio observations of the binary millisecond pulsar PSR J1640+2224
S. J. Vigeland, A. T. Deller, **D. L. Kaplan**, A. G. Istrate, B. W. Stappers, T. M. Tauris
2018, *Astrophysical Journal*, 855, 122
16. The Green Bank Northern Celestial Cap Pulsar Survey II: The Discovery and Timing of Ten Pulsars
A. M. Kawash, M. A. McLaughlin, **D. L. Kaplan** et al.
2018, *Astrophysical Journal*, 857, 131
17. A Serendipitous MWA Search for Narrow-band and Broad-band Low Frequency Radio Transmissions from 1I/2017 U1 'Oumuamua
S. J. Tingay, **D. L. Kaplan**, et al.
2018, *Astrophysical Journal*, 857, 11
18. A mildly relativistic wide-angle outflow in the neutron-star merger event GW170817
K. P. Mooley, E. Nakar, K. Hotokezaka, G. Hallinan, A. Corsi, D. A. Frail, A. Horesh, T. Murphy, E. Lenc, **D. L. Kaplan** et al.
2018, *Nature*, 554, 207

19. iPTF Archival Search for Fast Optical Transients
A. Y. Q. Ho et al. (including **D. L. Kaplan**)
2018, *Astrophysical Journal*, 854, 13
20. A Gaussian Mixture Model for Nulling Pulsars
D. L. Kaplan, J. K. Swiggum, T. D. Fichtenbauer, M. Vallisneri
2018, *Astrophysical Journal*, 855, 14
21. A radio counterpart to a neutron star merger
G. Hallinan, A. Corsi, K. P. Mooley, K. Hotokezaka, E. Nakar, M. M. Kasliwal, **D. L. Kaplan** et al.
2017, *Science*, 358, 1579
22. Illuminating gravitational waves: A concordant picture of photons from a neutron star merger
M. M. Kasliwal, E. Nakar, L. P. Singer, **D. L. Kaplan** et al.
2017, *Science*, 358, 1559
23. A Census of Southern Pulsars at 185 MHz
M. Xue et al. (including **D. L. Kaplan**)
2017, *PASA*, 34, 70
24. Follow Up of GW170817 and Its Electromagnetic Counterpart by Australian-Led Observing Programmes
I. Andreoni et al. (including **D. L. Kaplan**)
2017, *PASA*, 34, 69
25. Hunting Electromagnetic Counterparts of Gravitational-wave Events Using the Zwicky Transient Facility
S. Ghosh, D. Chatterjee, **D. L. Kaplan**, P. R. Brady, and A. Van Sistine
2017, *PASP*, 129k4503
26. Calibration and Stokes Imaging with Full Embedded Element Primary Beam Model for the Murchison Widefield Array
M. Sokolowski et al. (including **D. L. Kaplan**)
2017, *PASA*, 34, 62
27. Multi-messenger Observations of a Binary Neutron Star Merger
B. P. Abbot et al. (including **D. L. Kaplan**)
2017, *Astrophysical Journal Letters*, 848, 12
28. The Challenges of Low-Frequency Radio Polarimetry: Lessons from the Murchison Widefield Array
E. Lenc et al. (including **D. L. Kaplan**)
2017, *PASA*, 34, 40

29. A Multiwavelength Study of Nearby Millisecond Pulsar PSR J1400-1431: Improved Astrometry and an Optical Detection of Its Cool White Dwarf Companion
J. K. Swiggum, **D. L. Kaplan**, et al.
2017, *Astrophysical Journal*, 847, 25
30. The Engineering Development Array: A Low Frequency Radio Telescope Utilising SKA Precursor Technology
R. Wayth et al. (including **D. L. Kaplan**)
2017, *PASA*, 34, 34
31. A Search for Fast Radio Bursts with the GBNCC Pulsar Survey
P. Chawla et al. (including **D. L. Kaplan**)
2017, *Astrophysical Journal*, 844, 140
32. Wavelet-based Characterization of Small-scale Solar Emission Features at Low Radio Frequencies
A. Suresh et al. (including **D. L. Kaplan**)
2017, *Astrophysical Journal*, 843, 19
33. Low-Frequency Spectral Energy Distributions of Radio Pulsars Detected with the Murchison Widefield Array
T. Murphy, **D. L. Kaplan**, et al.
2017, *PASA*, 34, 20
34. A search for long-timescale, low-frequency radio transients
T. Murphy, **D. L. Kaplan**, et al.
2017, *MNRAS*, 466, 1944
35. A Matched Filter Technique for Slow Radio Transient Detection and First Demonstration with the Murchison Widefield Array
L. Feng, R. Vaulin, J. N. Hewitt, R. Remillard, **D. L. Kaplan** et al.
2017, *Astronomical Journal*, 153, 98
36. 154 MHz detection of faint, polarized flares from UV Ceti
C. R. Lynch, E. Lenc, T. Murphy, **D. L. Kaplan**, G. E. Anderson
2017, *Astrophysical Journal Letters*, 836, 30
37. Spectral energy distribution and radio halo of NGC 253 at low radio frequencies
A. D. Kapinska et al. (including **D. L. Kaplan**)
2017, *Astrophysical Journal*, 838, 68
38. A search for circularly polarised emission from young exoplanets
C. R. Lynch, T. Murphy, **D. L. Kaplan**, M. Ireland, M. E. Bell
2017, *MNRAS*, 467, 3447

39. GaLactic and Extragalactic All-sky Murchison Widefield Array (GLEAM) survey - I. A low-frequency extragalactic catalogue
N. Hurley-Walker et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 464, 1146
40. Strategies for Finding Prompt Radio Counterparts to Gravitational Wave Transients with the Murchison Widefield Array
D. L. Kaplan, T. Murphy, A. Rowlinson, S. D. Croft, R. B. Wayth, C. M. Trott
2016, *PASA*, 33, 50
41. A high reliability survey of discrete Epoch of Reionization foreground sources in the MWA EoR0 field
P. A. Carroll et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 461, 4151
42. Delay Spectrum with Phase-Tracking Arrays: Extracting the HI power spectrum from the Epoch of Reionization
S. Paul et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 833, 213
43. Transient Events in Archival Very Large Array Observations of the Galactic Center
A. Chiti, S. Chatterjee, R. Wharton, J. Cordes, T. J. W. Lazio, **D. L. Kaplan**, G. C. Bower, S. Croft
2016, *Astrophysical Journal*, 833, 11
44. Low-frequency Observations of Linearly Polarized Structures in the Interstellar Medium near the South Galactic Pole
E. Lenc et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 830, 38
45. An Eccentric Binary Millisecond Pulsar with a Helium White Dwarf Companion in the Galactic field
J. Antoniadis, **D. L. Kaplan**, et al.
2016, *Astrophysical Journal*, 830, 36
46. Photometric variability of candidate white dwarf binary systems from Palomar Transient Factory archival data
W. Kao, **D. L. Kaplan**, et al.
2016, *MNRAS*, 461, 2747
47. Time-domain and spectral properties of pulsars at 154 MHz
M. E. Bell, T. Murphy, S. Johnston, **D. L. Kaplan**, et al.
2016, *MNRAS*, 461, 908

48. Microarcsecond VLBI Pulsar Astrometry with PSR π . I. Two Binary Millisecond Pulsars with White Dwarf Companions
A. T. Deller, S. J. Vigeland, **D. L. Kaplan** et al.
2016, *Astrophysical Journal*, 828, 8
49. First limits on the 21 cm power spectrum during the Epoch of X-ray heating
A. Ewall-Wice et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 460, 4320
50. Timing of Five PALFA-Discovered Millisecond Pulsars
K. Stovall et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 833, 192
51. First Season MWA EoR Power Spectrum Results at Redshift 7
A. P. Beardsley et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 833, 102
52. The 154 MHz radio sky observed by the Murchison Widefield Array: noise, confusion, and first source count analyses
T. M. O. Franzen et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 459, 3314
53. Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914
B. P. Abbott et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal Letters*, 826, 13
54. Supplement: “Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914” (2016, ApJL, 826, L13)
B. P. Abbott et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal Supplement Series*, 225, 8
55. PSR J1024-0719: A Millisecond Pulsar in an Unusual Long-period Orbit
D. L. Kaplan et al.
2016, *Astrophysical Journal*, 826, 86
56. The Murchison Widefield Array 21 cm Power Spectrum Analysis Methodology
D. C. Jacobs et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 825, 114
57. A new angle for probing field-aligned irregularities with the Murchison Widefield Array
S. T. Loi et al. (including **D. L. Kaplan**)
2016, *Radio Science*, 51, 659

58. Search for optical pulsations in PSR J0337+1715
M. J. Strader et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 459, 427
59. Limits on Fast Radio Bursts and other transient sources at 182 MHz using the Murchison Widefield Array
A. Rawlinson et al. (including **D. L. Kaplan**)
2016, *MNRAS*, 458, 3506
60. A Large-Scale, Low-Frequency Murchison Widefield Array Survey of Galactic H II Regions between $260^\circ < l < 340^\circ$
L. Hindson et al. (including **D. L. Kaplan**)
2016, *PASA*, 33, 20
61. Ordinary X-Rays from Three Extraordinary Millisecond Pulsars: XMM-Newton Observations of PSRs J0337+1715, J0636+5129, and J0645+5158
R. Spiewak, **D. L. Kaplan**, et al.
2016, *Astrophysical Journal*, 822, 37
62. Limits on Einstein's Equivalence Principle from the First Localized Fast Radio Burst FRB 150418
S. J. Tingay & **D. L. Kaplan**
2016, *Astrophysical Journal Letters*, 820, L31
63. Murchison Widefield Array Limits on Radio Emission from ANTARES Neutrino Events
S. Croft, **D. L. Kaplan**, et al.
2016, *Astrophysical Journal Letters*, 820, L24
64. High-energy sources at low radio frequency: the Murchison Widefield Array view of Fermi blazars
M. Giroletti et al. (including **D. L. Kaplan**)
2016, *Astronomy & Astrophysics*, 588, 141
65. Beam-forming Errors in Murchison Widefield Array Phased Array Antennas and their Effects on Epoch of Reionization Science
A. R. Neben et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 820, 44
66. The host galaxy of a fast radio burst
E. F. Keane et al. (including **D. L. Kaplan**)
2016, *Nature*, 530, 453
67. The Importance of Wide-field Foreground Removal for 21 cm Cosmology: A Demonstration With Early MWA Epoch of Reionization Observations

- J. C. Pober et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, 819, 8
68. Density duct formation in the wake of a travelling ionospheric disturbance: Murchison Widefield Array observations
S. T. Loi et al. (including **D. L. Kaplan**)
2016, *Journal of Geophysical Research: Space Physics*, 121, 1569
69. CHIPS: The Cosmological HI Power Spectrum Estimator
C. M. Trott et al. (including **D. L. Kaplan**)
2016, *Astrophysical Journal*, in press, 818, 139
70. Properties and Evolution of the Redback Millisecond Pulsar Binary PSR J2129-0429
E. Bellm, **D. L. Kaplan**, et al.
2016, *Astrophysical Journal*, 816, 74
71. Hunting Gravitational Waves with Multi-Messenger Counterparts: Australia's Role
E. J. Howell, A. Rowlinson, D. M. Coward, P. D. Lasky, **D. L. Kaplan** et al.
2015, *PASA*, 32, 46
72. A Deep Search for Prompt Radio Emission from the Short GRB 150424A with the Murchison Widefield Array
D. L. Kaplan et al.
2015, *Astrophysical Journal*, 814, L25
73. A Search for Fast Radio Bursts at Low Frequencies with Murchison Widefield Array High Time Resolution Imaging
S. J. Tingay et al. (including **D. L. Kaplan**)
2015, *Astronomical Journal*, 150, 199
74. Quantifying ionospheric effects on time-domain astrophysics with the Murchison Widefield Array
S. T. Loi, T. Murphy, M. E. Bell, **D. L. Kaplan** et al.
2015, *MNRAS*, 453, 2731
75. Optical Modulation in the X-Ray Binary 4U 1543-624 Revisited
Z. Wang, A. Tziamtzis, **D. L. Kaplan**, D. Chakrabarty
2015, *PASA*, 32, 35
76. Ionospheric Modelling using GPS to Calibrate the MWA. I: Comparison of First Order Ionospheric Effects between GPS Models and MWA Observations
B. S. Arora et al. (including **D. L. Kaplan**)
2015, *PASA*, 32, 29

77. An analysis of the halo and relic radio emission from Abell 3376 from Murchison Widefield Array observations
L. T. George et al. (including **D. L. Kaplan**)
2015, *MNRAS*, 451, 4207
78. Murchison Widefield Array Observations of Anomalous Variability: A Serendipitous Night-time Detection of Interplanetary Scintillation
D. L. Kaplan et al.
2015, *Astrophysical Journal*, 809, L12
79. Broadband Spectral Modeling of the Extreme Gigahertz-peaked Spectrum Radio Source PKS B0008-421
J. R. Callingham et al. (including **D. L. Kaplan**)
2015, *Astrophysical Journal*, 809, 168
80. Discovery and Follow-up of Rotating Radio Transients with the Green Bank and LOFAR Telescopes
C. Karako-Argaman et al. (including **D. L. Kaplan**)
2015, *Astrophysical Journal*, 809, 67
81. Simultaneous Observations of Giant Pulses from the Crab Pulsar, with the Murchison Widefield Array and Parkes Radio Telescope: Implications for the Giant Pulse Emission Mechanism.
S. I. Oronsaye et al. (including **D. L. Kaplan**)
2015, *Astrophysical Journal*, 809, 51
82. Power spectrum analysis of ionospheric fluctuations with the Murchison Widefield Array
S. T. Loi et al. (including **D. L. Kaplan**)
2015, *Radio Science*, 50, 574
83. Confirmation of Wide-field Signatures in Redshifted 21 cm Power Spectra
N. Thyagarajan et al. (including **D. L. Kaplan**)
2015, *Astrophysical Journal*, 807, L28
84. A Highly Eccentric 3.9 Millisecond Binary Pulsar in the Globular Cluster NGC 6652
M. E. DeCesar, S. M. Ransom, D. L. Kaplan, P. S. Ray, A. M. Geller
2015, *Astrophysical Journal*, 807, L23
85. Empirical covariance modeling for 21 cm power spectrum estimation: A method demonstration and new limits from early Murchison Widefield Array 128-tile data
J. S. Dillon et al. (including **D. L. Kaplan**)
2015, *Physical Review D*, 91, 123011

86. GLEAM: The GaLactic and Extragalactic All-Sky MWA Survey
R. B. Wayth et al. (including **D. L. Kaplan**)
2015, *PASA*, 32, 25
87. Real-time imaging of density ducts between the plasmasphere and ionosphere
S. T. Loi et al. (including **D. L. Kaplan**)
2015, *Geophysical Research Letters*, 42, 3707
88. Foregrounds in Wide-field Redshifted 21 cm Power Spectra
N. Thyagarajan et al. (including **D. L. Kaplan**)
2015, *Astrophysical Journal*, 804, 14
89. Serendipitous discovery of a dying Giant Radio Galaxy associated with NGC 1534, using the Murchison Widefield Array
N. Hurley-Walker et al. (including **D. L. Kaplan**)
2015, *MNRAS*, 447, 2468
90. The Spectral Variability of the GHz-Peaked Spectrum Radio Source PKS 1718-649 and a Comparison of Absorption Models
S. Tingay et al. (including **D. L. Kaplan**)
2015, *Astronomical Journal*, 149, 74
91. The Murchison Widefield Array Commissioning Survey: A Low-Frequency Catalogue of 14,110 Compact Radio Sources over 6,100 Square Degrees
N. Hurley-Walker et al. (including **D. L. Kaplan**)
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