

Arecibo Publications in Astronomy

October 2015 – September 2016

- Arzoumanian, Z. et al. (2016), 'The NANOGrav Nine-year Data Set: Limits on the Isotropic Stochastic Gravitational Wave Background', *ApJ*, 821, 13.
- ✦ Chengalur, J. N.; **Ghosh, T.**; **Salter, C. J.**; Kanekar, N.; Momjian, E.; Keeney, B. A. & Stocke, J. T. (2015), 'H I 21cm emission from the subdamped Lyman- α absorber at $z = 0.0063$ towards PG 1216+069', *MNRAS*, 453, 3135-3142.
- Clark, S. E.; Hill, J. C.; Peek, J. E. G.; Putman, M. E. & Babler, B. L. (2015), 'Neutral Hydrogen Structures Trace Dust Polarization Angle: Implications for Cosmic Microwave Background Foregrounds', *Physical Review Letters*, 115(24), 241302.
- Cromartie, H. T. et al. (2016), 'Six New Millisecond Pulsars from Arecibo Searches of Fermi Gamma-Ray Sources', *ApJ*, 819, 34.
- Deneva, J. S. et al. (2016), 'Multiwavelength Observations of the Redback Millisecond Pulsar J1048+2339', *ApJ*, 823, 105.
- Deneva, J. S. et al. (2016), 'New Discoveries from the Arecibo 327 MHz Drift Pulsar Survey Radio Transient Search', *ApJ*, 821, 10.
- Dolch, T. et al. (2016), 'Single-Source Gravitational Wave Limits From the J1713+0747 24-hr Global Campaign', *Journal of Physics Conference Series*, 716(1), 012014.
- Eilek, J. A. & Hankins, T. H. (2016), 'Radio emission physics in the Crab pulsar', *Journal of Plasma Physics*, 82(3), 635820302.
- Goldsmith, P. F.; Pineda, J. L.; Langer, W. D.; Liu, T.; Requena-Torres, M.; Ricken, O. & Riquelme, D. (2016), 'L1599B: Cloud Envelope and C⁺ Emission in a Region of Moderately Enhanced Radiation Field', *ApJ*, 824, 141.
- Hirschauer, A. S. et al. (2016), 'ALFALFA Discovery of the Most Metal-poor Gas-rich Galaxy Known: AGC 198691', *ApJ*, 822, 108.
- ✦ Hoppmann, L.; Staveley-Smith, L.; Freudling, W.; Zwaan, M. A.; **Minchin, R. F.** & Calabretta, M. R. (2015), 'A blind H I mass function from the Arecibo Ultra-Deep Survey (AUDS)', *MNRAS*, 452, 3726-3741.
- Johnson, M. D. et al. (2016), 'Extreme Brightness Temperatures and Refractive Substructure in 3C273 with RadioAstron', *ApJ*, 820, L10.

- Jones, M. G.; Papastergis, E.; Haynes, M. P. & Giovanelli, R. (2016), 'Environmental dependence of the H I mass function in the ALFALFA 70% catalogue', MNRAS, 457, 4393-4405.
- ✧ Keenan, O. C.; Davies, J. I.; Taylor, R. & **Minchin, R. F.** (2016), 'The Arecibo Galaxy Environment Survey - X. The structure of halo gas around M33', MNRAS, 456, 951-960.
- ✧ Kovalev, Y. Y. et al., inc. **Ghosh, T. & Salter, C. J.** (2016), 'RadioAstron Observations of the Quasar 3C273: A Challenge to the Brightness Temperature Limit', ApJ, 820, L9.
- Lam, M. T. (2016), 'The NANOGrav Nine-year Data Set: Noise Budget for Pulsar Arrival Times on Intraday Timescales', ApJ, 819, 155.
- Lam, M. T.; Cordes, J. M.; Chatterjee, S.; Jones, M. L.; McLaughlin, M. A. & Armstrong, J. W. (2016), 'Systematic and Stochastic Variations in Pulsar Dispersion Measures', ApJ, 821, 66.
- ✧ Lazarus, P. et al., inc. **Venkataraman, A.** (2015), 'Arecibo Pulsar Survey Using ALFA. IV. Mock Spectrometer Data Analysis, Survey Sensitivity, and the Discovery of 40 Pulsars', ApJ, 812, 81.
- ✧ Lehnert, M. D.; van Driel, W. & **Minchin, R.** (2016), 'Can galaxy growth be sustained through HI-rich minor mergers?', A&A, 590, A51.
- Lentati, L. et al. (2016), 'From spin noise to systematics: stochastic processes in the first International Pulsar Timing Array data release', MNRAS, 458, 2161-2187.
- Levin, L. et al. (2016), 'The NANOGrav Nine-year Data Set: Monitoring Interstellar Scattering Delays', ApJ, 818, 166.
- Liu, S.; Pen, U.-L.; Macquart, J.-P.; Brisken, W. & Deller, A. (2016), 'Pulsar lensing geometry', MNRAS, 458, 1289-1299.
- Martínez-Delgado, D. et al. (2016), 'Discovery of an Ultra-diffuse Galaxy in the Pisces-Perseus Supercluster', AJ, 151, 96.
- Matthews, A. M. et al. (2016), 'The NANOGrav Nine-year Data Set: Astrometric Measurements of 37 Millisecond Pulsars', ApJ, 818, 92.
- ✧ **Minchin, R. F.** et al. (2016), 'The Arecibo Galaxy Environment Survey IX: the isolated galaxy sample', MNRAS, 455, 3430-3435.

- Mitra, D.; Rankin, J. & Arjunwadkar, M. (2016), 'Core and conal component analysis of pulsar B1933+16: investigation of the segregated modes', MNRAS, 460, 3063-3075.
- Odekon, M. C. et al. (2016), 'The HI Content of Galaxies in Groups and Clusters as Measured by ALFALFA', ApJ, 824, 110.
- Park, G. et al. (2016), 'A High-velocity Cloud Impact Forming a Supershell in the Milky Way', ApJ, 827, L27.
- Perera, B. B. P.; Stappers, B. W.; Weltevrede, P.; Lyne, A. G. & Rankin, J. M. (2016), 'Correlated spin-down rates and radio emission in PSR B1859+07', MNRAS, 455, 1071-1078.
- Pierbattista, M.; Harding, A. K.; Gonthier, P. L. & Grenier, I. A. (2016), 'Young and middle age pulsar light-curve morphology: Comparison of Fermi observations with X-ray and radio emission geometries', A&A, 588, A137.
- Route, M. & Wolszczan, A. (2016), 'Radio Flaring from the T6 Dwarf WISEPC J112254.73+255021.5 with a Possible Ultra-short Periodicity', ApJ, 821, L21.
- ☆ **Schmelz, J. T.**; Pathak, S.; Christian, G. M.; Dhaliwal, R. S. S. & Paul, K. S. (2015), 'The Coronal Loop Inventory Project', ApJ, 813, 71.
- ✧ Spitler, L. G. et al., inc. **Seymour, A.** (2016), 'A repeating fast radio burst', Nature, 531, 202-205.
- Straal, S. M. et al. (2016), 'HESS J1943+213: A Non-classical High-frequency-peaked BL Lac Object', ApJ, 822, 117.
- Suess, K. A.; Darling, J.; Haynes, M. P. & Giovanelli, R. (2016), 'Identifying OH Imposters in the ALFALFA Neutral Hydrogen Survey', MNRAS, 459, 220-231.
- Taylor, R. (2015), 'FRELLED: A realtime volumetric data viewer for astronomers', Astronomy and Computing, 13, 67-79.
- ✧ Taylor, R. et al., inc. **Minchin, R. F.** (2016), 'Attack of the flying snakes: formation of isolated HI clouds by fragmentation of long streams', MNRAS, 461, 3001-3026.
- Teixeira, M. M.; Rankin, J. M.; Wright, G. A. E. & Dyks, J. (2016), 'Investigations of the emission geometry of the four-component radio pulsar J0631+1036', MNRAS, 455, 3201-3206.
- Verbiest, J. P. W. et al. (2016), 'The International Pulsar Timing Array: First data release', MNRAS, 458, 1267-1288.

☆ **Verschuur, G. L.** (2015), 'Associations between Small-scale Structure in Local Galactic Neutral Hydrogen and in the Cosmic Microwave Background Observed by PLANCK', *ApJ*, 813, 19.

● Xu, D.; Li, D.; Yue, N. & Goldsmith, P. F. (2016), 'Evolution of OH and CO-Dark Molecular Gas Fraction across a Molecular Cloud Boundary in Taurus', *ApJ*, 819, 22.

● Yan, T.; Stocke, J. T.; Darling, J.; Momjian, E.; Sharma, S. & Kanekar, N. (2016), 'Invisible Active Galactic Nuclei. II. Radio Morphologies and Five New H i 21cm Absorption Line Detectors', *AJ*, 151, 74.

● Zhong-zu, W.; Martha P, H.; Riccardo, G.; Ming, Z. & Ru-rong, C. (2015), 'HI Absorption Lines Detected from the Arecibo Legacy Fast ALFA Survey Data', *Chinese Astronomy and Astrophysics*, 39, 466-478.

● – AO Data

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⊕ – AO Staff and Data