

PUBLICATIONS

- [1] Danny C. Price, J. Emilio Enriquez, Bryan Brzycki, Steve Croft, Daniel Czech, David DeBoer, Julia DeMarines, **Griffin Foster**, Vishal Gajjar, Nectaria Gizani, Greg Hellbourg, Howard Isaacson, Brian Lacki, Matt Lebofsky, David H. E. MacMahon, Imke de Pater, Andrew P. V. Siemion, Dan Werthimer, James A. Green, Jane F. Kaczmarek, Ronald J. Maddalena, Stacy Mader, Jamie Drew, and S. Pete Worden. The Breakthrough Listen Search for Intelligent Life: Observations of 1327 Nearby Stars Over 1.103.45 GHz. *The Astronomical Journal*, 159(3):86, March 2020.
- [2] Matthew Lebofsky, Steve Croft, Andrew P. V. Siemion, Danny C. Price, J. Emilio Enriquez, Howard Isaacson, David H. E. MacMahon, David Anderson, Bryan Brzycki, Jeff Cobb, Daniel Czech, David DeBoer, Julia DeMarines, Jamie Drew, **Griffin Foster**, Vishal Gajjar, Nectaria Gizani, Greg Hellbourg, Eric J. Korpela, Brian Lacki, Sofia Sheikh, Dan Werthimer, Pete Worden, Alex Yu, and Yunfan Gerry Zhang. The Breakthrough Listen Search for Intelligent Life: Public Data, Formats, Reduction, and Archiving. *Publications of the Astronomical Society of the Pacific*, 131(1006):124505, December 2019.
- [3] Mayuresh P. Surnis, D. Agarwal, D. R. Lorimer, X. Pei, **G. Foster**, A. Karastergiou, G. Golpayegani, R. J. Maddalena, S. White, W. Armour, J. Cobb, M. A. McLaughlin, D. H. E. MacMahon, A. P. V. Siemion, D. Werthimer, and C. J. Williams. GREENBURST: A commensal Fast Radio Burst search back-end for the Green Bank Telescope. *Publications of the Astronomical Society of Australia*, 36:e032, August 2019.
- [4] D. C. Price, **G. Foster**, M. Geyer, W. van Straten, V. Gajjar, G. Hellbourg, A. Karastergiou, E. F. Keane, A. P. V. Siemion, I. Arcavi, R. Bhat, M. Caleb, S. W. Chang, S. Croft, D. DeBoer, I. de Pater, J. Drew, J. E. Enriquez, W. Farah, N. Gizani, J. A. Green, H. Isaacson, J. Hickish, A. Jameson, M. Lebofsky, D. H. E. MacMahon, A. Möller, C. A. Onken, E. Petroff, D. Werthimer, C. Wolf, S. P. Worden, and Y. G. Zhang. A fast radio burst with frequency-dependent polarization detected during Breakthrough Listen observations. *Monthly Notices of the Royal Astronomical Society*, 486(3):3636–3646, July 2019.
- [5] **G. Foster**, A. Karastergiou, M. Geyer, M. Surnis, G. Golpayegani, K. Lee, D. Lorimer, D. C. Price, and K. Rajwade. Verifying and reporting Fast Radio Bursts. *Monthly Notices of the Royal Astronomical Society*, 481:2612–2627, December 2018.
- [6] Danny C. Price, David H. E. MacMahon, Matt Lebofsky, Steve Croft, David DeBoer, J. Emilio Enriquez, **Griffin S. Foster**, Vishal Gajjar, Nectaria Gizani, Greg Hellbourg, Howard Isaacson, Andrew P. V. Siemion, Dan Werthimer, James A. Green, Shaun Amy, Lewis Ball, Douglas C. J. Bock, Dan Craig, Philip G. Edwards, Andrew Jameson, Stacy Mader, Brett Preisig, Mal Smith, John Reynolds, and John Sarkissian. The Breakthrough Listen search for intelligent life: Wide-bandwidth digital instrumentation for the CSIRO Parkes 64-m telescope. *Publications of the Astronomical Society of Australia*, 35:41, Nov 2018.
- [7] Y. G. Zhang, V. Gajjar, **G. Foster**, A. Siemion, J. Cordes, C. Law, and Y. Wang. Fast Radio Burst 121102 Pulse Detection and Periodicity: A Machine Learning Approach. *The Astrophysical Journal*, 866:149, October 2018.
- [8] V. Gajjar, A. P. V. Siemion, D. C. Price, C. J. Law, D. Michilli, J. W. T. Hessels, S. Chatterjee, A. M. Archibald, G. C. Bower, C. Brinkman, S. Burke-Spolaor, J. M. Cordes, S. Croft, J. E. Enriquez, **G. Foster**, N. Gizani, G. Hellbourg, H. Isaacson, V. M. Kaspi, T. J. W. Lazio, M. Lebofsky, R. S. Lynch, D. MacMahon, M. A. McLaughlin, S. M. Ransom, P. Scholz, A. Seymour, L. G. Spitler, S. P. Tendulkar, D. Werthimer, and Y. G. Zhang. Highest Frequency Detection of FRB 121102 at 4-8 GHz Using the Breakthrough Listen Digital Backend at the Green Bank Telescope. *The Astrophysical Journal*, 863:2, August 2018.
- [9] F. Camilo, P. Scholz, M. Serylak, S. Buchner, M. Merryfield, V. M. Kaspi, R. F. Archibald, M. Bailes, A. Jameson, W. van Straten, and et al. Revival of the Magnetar PSR J1622-4950: Observations with MeerKAT, Parkes, XMM-Newton, Swift, Chandra, and NuSTAR. *The Astrophysical Journal*, 856:180, April 2018.
- [10] M. Atemkeng, O. Smirnov, C. Tasse, **G. Foster**, A. Keimpema, Z. Paragi, and J. Jonas. Baseline-dependent sampling and windowing for radio interferometry: data compression, field-of-interest shaping and outer field suppression. *Monthly Notices of the Royal Astronomical Society*, March 2018.

- [11] **G. Foster**, A. Karastergiou, G. Golpayegani, M. Surnis, D. R. Lorimer, J. Chennamangalam, M. McLaughlin, W. Armour, J. Cobb, D. H. E. MacMahon, X. Pei, K. Rajwade, A. P. V. Siemion, D. Werthimer, and C. J. Williams. ALFABURST: a commensal search for fast radio bursts with Arecibo. *Monthly Notices of the Royal Astronomical Society*, 474:3847–3856, March 2018.
- [12] J. E. Enriquez, A. Siemion, **G. Foster**, V. Gajjar, G. Hellbourg, J. Hickish, H. Isaacson, D. C. Price, S. Croft, D. DeBoer, M. Lebofsky, D. H. E. MacMahon, and D. Werthimer. The Breakthrough Listen Search for Intelligent Life: 1.1–1.9 GHz Observations of 692 Nearby Stars. *The Astrophysical Journal*, 849:104, November 2017.
- [13] C. D. Nunhokee, G. Bernardi, S. A. Kohn, J. E. Aguirre, N. Thyagarajan, J. S. Dillon, **G. Foster**, T. L. Grobler, J. Z. E. Martinot, and A. R. Parsons. Constraining Polarized Foregrounds for EoR Experiments. II. Polarization Leakage Simulations in the Avoidance Scheme. *The Astrophysical Journal*, 848:47, October 2017.
- [14] J. Hickish, Z. Abdurashidova, Z. Ali, K. D. Buch, S. C. Chaudhari, H. Chen, M. Dexter, R. S. Domagalski, J. Ford, **G. Foster**, D. George, J. Greenberg, L. Greenhill, A. Isaacson, H. Jiang, G. Jones, F. Kapp, H. Kriel, R. Lacasse, A. Lutomirski, D. MacMahon, J. Manley, A. Martens, R. McCullough, M. V. Muley, W. New, A. Parsons, D. C. Price, R. A. Primiani, J. Ray, A. Siemion, V. Van Tonder, L. Vertatschitsch, M. Wagner, J. Weintraub, and D. Werthimer. A Decade of Developing Radio-Astronomy Instrumentation using CASPER Open-Source Technology. *Journal of Astronomical Instrumentation*, January 2017.
- [15] M. T. Atemkeng, O. M. Smirnov, C. Tasse, **G. Foster**, and J. Jonas. Using baseline-dependent window functions for data compression and field-of-interest shaping in radio interferometry. *Monthly Notices of the Royal Astronomical Society*, 462:2542–2558, November 2016.
- [16] **G. Foster**, A. Akoto-Danso, M. Atemkeng, L. Bester, T. Blecher, R. Deane, J. Girard, T. Grobler, B. Hugo, G. Jozsa, E. Abebe Kassaye, J. Kenyon, S. Makhathini, M. Mitra, N. Norman, R. Nunhokee, S. Perkins, L. Richter, L. Sebokolodi, O. Smirnov, U. Mbou Sob, and K. Thorat. Fundamentals of radio interferometry, 2016. https://github.com/griffinfooster/fundamentals_of_interferometry.
- [17] **G. Foster**, A. Karastergiou, R. Paulin, T. D. Carozzi, S. Johnston, and W. van Straten. Intrinsic instrumental polarization and high-precision pulsar timing. *Monthly Notices of the Royal Astronomical Society*, 453(2):1489–1502, 2015.
- [18] **G. Foster**, J. Hickish, A. Magro, D. Price, and K. Zarb Adami. Implementation of a direct-imaging and fx correlator for the best-2 array. *Monthly Notices of the Royal Astronomical Society*, 439(3):3180–3188, 2014.
- [19] **G. Foster**. *Large-N Correlator Systems for Low Frequency Astronomy*. PhD thesis, University of Oxford, 2013.
- [20] A. P. V. Siemion, G. C. Bower, **G. Foster**, P. L. McMahon, M. I. Wagner, D. Werthimer, D. Backer, J. Cordes, and J. van Leeuwen. The Allen Telescope Array Fly’s Eye Survey for Fast Radio Transients. *The Astrophysical Journal*, 744:109, January 2012.
- [21] A. Siemion, J. Von Korff, P. McMahon, E. Korpela, D. Werthimer, D. Anderson, G. Bower, J. Cobb, **G. Foster**, M. Lebofsky, J. van Leeuwen, and M. Wagner. New SETI sky surveys for radio pulses. *Acta Astronautica*, 67:1342–1349, December 2010.
- [22] M. Ganeshalingam, W. Li, A. V. Filippenko, C. Anderson, **G. Foster**, E. L. Gates, C. V. Griffith, B. J. Grigsby, N. Joubert, J. Leja, T. B. Lowe, B. Macomber, T. Pritchard, P. Thrasher, and D. Winslow. Results of the Lick Observatory Supernova Search Follow-up Photometry Program: BVRI Light Curves of 165 Type Ia Supernovae. *Astrophysical Journal*, 190:418–448, October 2010.
- [23] A. R. Parsons, D. C. Backer, **G. S. Foster**, M. C. H. Wright, R. F. Bradley, N. E. Gugliucci, C. R. Parashare, E. E. Benoit, J. E. Aguirre, D. C. Jacobs, C. L. Carilli, D. Herne, M. J. Lynch, J. R. Manley, and D. J. Werthimer. The Precision Array for Probing the Epoch of Re-ionization: Eight Station Results. *Astronomical Journal*, 139:1468–1480, April 2010.