

## References

- [1] S. Walsh, M. Pitkin, M. Oliver, S. D'Antonio, V. Dergachev, A. Krolak, P. Astone, M. Bejger, M. Di Giovanni, O. Dorosh, S. Frasca, P. Leaci, S. Mastrogiovanni, A. Miller, C. Palomba, M. Alessandra Papa, O. J. Piccinni, K. Riles, O. Sauter, and A. M. Sintes. A comparison of methods for the detection of gravitational waves from unknown neutron stars. *ArXiv e-prints*, June 2016.
- [2] G. S. Davies, M. Pitkin, and G. Woan. A targeted spectral interpolation algorithm for the detection of continuous gravitational waves. *ArXiv e-prints*, March 2016.
- [3] M. Pitkin, C. Messenger, and L. Wright. Astrophysical calibration of gravitational-wave detectors. *Phys. Rev. D*, 93(6):062002, March 2016.
- [4] B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, C. Adams, T. Adams, P. Addesso, R. X. Adhikari, and et al. Observation of Gravitational Waves from a Binary Black Hole Merger. *Phys. Rev. Lett.*, 116(6):061102, February 2016.
- [5] B. P. Abbott and et al. Observing gravitational-wave transient GW150914 with minimal assumptions. *ArXiv e-prints*, February 2016.
- [6] B. P. Abbott and et al. Properties of the binary black hole merger GW150914. *ArXiv e-prints*, February 2016.
- [7] M. Pitkin, C. Gill, D. I. Jones, G. Woan, and G. S. Davies. First results and future prospects for dual-harmonic searches for gravitational waves from spinning neutron stars. *MNRAS*, 453:4399–4420, November 2015.
- [8] S. Leavey, B. W. Barr, A. S. Bell, N. Gordon, C. Gräf, S. Hild, S. H. Huttner, E.-B. Kley, S. Kroker, J. Macarthur, C. Messenger, M. Pitkin, B. Sorazu, K. Strain, and A. Tünnermann. Upper limit to the transverse to longitudinal motion coupling of a waveguide mirror. *Classical and Quantum Gravity*, 32(17):175005, September 2015.
- [9] M. Pitkin. Comment on Measurements of Newton's gravitational constant and the length of day by Anderson J. D. et al. *Europhysics Letters*, 111:30002, August 2015.
- [10] M. Isi, A. J. Weinstein, C. Mead, and M. Pitkin. Detecting beyond-Einstein polarizations of continuous gravitational waves. *Phys. Rev. D*, 91(8):082002, April 2015.
- [11] J. Veitch, V. Raymond, B. Farr, W. Farr, P. Graff, S. Vitale, B. Aylott, K. Blackburn, N. Christensen, M. Coughlin, W. Del Pozzo, F. Feroz, J. Gair, C.-J. Haster, V. Kalogera, T. Littenberg, I. Mandel, R. O'Shaughnessy, M. Pitkin, C. Rodriguez, C. Röver, T. Sidery, R. Smith, M. Van Der Sluys, A. Vecchio, W. Voudsen, and L. Wade. Parameter estimation for compact binaries with ground-based gravitational-wave observations using the LALInference software library. *Phys. Rev. D*, 91(4):042003, February 2015.
- [12] M. Pitkin, D. Williams, L. Fletcher, and S. D. T. Grant. A Bayesian method for detecting stellar flares. *MNRAS*, 445:2268–2284, December 2014.
- [13] J. Aasi, B. P. Abbott, R. Abbott, T. Abbott, M. R. Abernathy, T. Accadia, F. Acernese, K. Ackley, C. Adams, T. Adams, and et al. Implementation of an F-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. *Classical and Quantum Gravity*, 31(16):165014, August 2014.
- [14] J. Aasi, J. Abadie, B. P. Abbott, R. Abbott, T. Abbott, M. R. Abernathy, T. Accadia, F. Acernese, C. Adams, T. Adams, and et al. Gravitational Waves from Known Pulsars: Results from the Initial Detector Era. *ApJ*, 785:119, April 2014.
- [15] Y.-M. Hu, M. Pitkin, I. S. Heng, and M. A. Hendry. Glitch or Anti-glitch: A Bayesian View. *ApJ*, 784:L41, April 2014.
- [16] J. Aasi, J. Abadie, B. P. Abbott, R. Abbott, T. D. Abbott, M. Abernathy, T. Accadia, F. Acernese, K. Ackley, C. Adams, and et al. The ninja-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. *Classical and Quantum Gravity*, 31(11):115004, January 2014.
- [17] G. Hammond, S. Hild, and M. Pitkin. Advanced technologies for future ground-based, laser-interferometric gravitational wave detectors. *Journal of Modern Optics*, 61(1):S10–S45, 2014.

- [18] J. Aasi, J. Abadie, B. P. Abbott, R. Abbott, T. D. Abbott, M. Abernathy, T. Accadia, F. Acernese, C. Adams, T. Adams, and et al. Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. *Phys. Rev. D*, 88(6):062001, September 2013.
- [19] M. Pitkin. Extending gravitational wave burst searches with pulsar timing arrays. *MNRAS*, 425:2688–2697, October 2012.
- [20] M. Pitkin, C. Gill, J. Veitch, E. Macdonald, and G. Woan. A new code for parameter estimation in searches for gravitational waves from known pulsars. *Journal of Physics Conference Series*, 363(1):012041, June 2012.
- [21] J. Abadie, B. P. Abbott, R. Abbott, M. Abernathy, T. Accadia, F. Acernese, C. Adams, R. Adhikari, C. Affeldt, B. Allen, and et al. Beating the Spin-down Limit on Gravitational Wave Emission from the Vela Pulsar. *ApJ*, 737:93–+, August 2011.
- [22] M. Pitkin. Prospects of observing continuous gravitational waves from known pulsars. *MNRAS*, 415:1849–1863, August 2011.
- [23] M. Pitkin, S. Reid, S. Rowan, and J. Hough. Gravitational Wave Detection by Interferometry (Ground and Space). *Living Reviews in Relativity*, 14:5–+, July 2011.
- [24] J. Abadie, B. P. Abbott, R. Abbott, R. Adhikari, P. Ajith, B. Allen, G. Allen, E. Amador Ceron, R. S. Amin, S. B. Anderson, and et al. Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. *Phys. Rev. D*, 83(4):042001–+, February 2011.
- [25] B. P. Abbott, R. Abbott, F. Acernese, R. Adhikari, P. Ajith, B. Allen, G. Allen, M. Alshourbagy, R. S. Amin, S. B. Anderson, and et al. Searches for Gravitational Waves from Known Pulsars with Science Run 5 LIGO Data. *ApJ*, 713:671–685, April 2010.
- [26] B. P. Abbott, R. Abbott, R. Adhikari, P. Ajith, B. Allen, G. Allen, R. S. Amin, S. B. Anderson, W. G. Anderson, M. A. Arain, and et al. Search for high frequency gravitational-wave bursts in the first calendar year of LIGO’s fifth science run. *Phys. Rev. D*, 80(10):102002–+, November 2009.
- [27] B. Abbott, R. Abbott, R. Adhikari, P. Ajith, B. Allen, G. Allen, R. Amin, S. B. Anderson, W. G. Anderson, M. A. Arain, and et al. Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. *ApJ*, 683:L45–L49, August 2008.
- [28] J. Clark, I. S. Heng, M. Pitkin, and G. Woan. An evidence based time-frequency search method for gravitational waves from pulsar glitches. *Journal of Physics Conference Series*, 122(1):012035–+, July 2008.
- [29] M. Pitkin, J. Clark, M. A. Hendry, I. S. Heng, C. Messenger, J. Toher, and G. Woan. Is there potential complementarity between LISA and pulsar timing? *Journal of Physics Conference Series*, 122(1):012004–+, July 2008.
- [30] B. Abbott, R. Abbott, R. Adhikari, J. Agresti, P. Ajith, B. Allen, R. Amin, S. B. Anderson, W. G. Anderson, M. Arain, and et al. Upper limits on gravitational wave emission from 78 radio pulsars. *Phys. Rev. D*, 76(4):042001–+, August 2007.
- [31] J. Clark, I. S. Heng, M. Pitkin, and G. Woan. Evidence-based search method for gravitational waves from neutron star ring-downs. *Phys. Rev. D*, 76(4):043003–+, August 2007.
- [32] M. Pitkin and G. Woan. Binary system delays and timing noise in searches for gravitational waves from known pulsars. *Phys. Rev. D*, 76(4):042006–+, August 2007.
- [33] M. Pitkin and the LIGO Scientific Collaboration. Searching for gravitational waves from known pulsars. *Classical and Quantum Gravity*, 22:1277–+, September 2005.
- [34] B. Abbott, R. Abbott, R. Adhikari, A. Ageev, B. Allen, R. Amin, S. B. Anderson, W. G. Anderson, M. Araya, H. Armandula, and et al. Limits on Gravitational-Wave Emission from Selected Pulsars Using LIGO Data. *Physical Review Letters*, 94(18):181103–+, May 2005.
- [35] M. Pitkin and G. Woan. Searching for gravitational waves from the Crab pulsar—the problem of timing noise. *Classical and Quantum Gravity*, 21:843–+, March 2004.