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Journal Articles

Please note that I have additional publications co-authored as a member of the LIGO scientific collaboration; I have chosen to list here only those publications to which I significantly contributed.

- Ashton, Gregory; Prix, Reinhard; Jones, Ian “A semicoherent glitch-robust continuous gravitational wave search” *submitted to Physical Review D*.
- Sarin, Nikhil; Lasky, Paul D.; Sammut, Letizia; Ashton, Greg “An X-ray guided gravitational-wave search for binary neutron star merger remnants” *submitted to Physical Review D*.
- Ashton, Gregory; Prix, Reinhard “Hierarchical multi-stage MCMC follow-up of continuous gravitational wave candidates” *Accepted by Physical Review D*.
- B.P. Abbott et al. (LIGO Scientific Collaboration and Virgo Collaboration), “First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data” *Physical Review D*, 96, 122004 (2017).
- Ashton, Gregory; Jones, David Ian; Prix, Reinhard “Advances in our understanding of the free precession candidate PSR B1828-11” *Pulsar Astrophysics - The Next 50 Years*, Proceedings IAU Symposium No. 337, (2017).
- Ashton, Gregory; Burns, Eric; Dal Canton, Tito and 6 others “Coincident detection significance in multimessenger astronomy” *The Astrophysical Journal*, 860, 1, (2018).
- Ashton, G.; Prix, R.; Jones, D. I “Statistical characterization of pulsar glitches and their potential impact on searches for continuous gravitational waves” *Physical Review D*, 96, 6 (2017).
- Jones, D. I., Ashton, G., Prix, R “Implications of the Occurrence of Glitches in Pulsar Free Precession Candidates” *Physical Review Letters*, 118, 26 (2017).
- Ashton G., Jones D. I., and Prix R. “On the free precession candidate PSR B1828-11: Evidence for increasing deformation”, *Monthly Notices of the Royal Astronomical Society*, 467.1, 164-178, (2017).
- Baker A., Beg M., Ashton G., and 13 others, “Proposal of a micromagnetic standard problem for ferromagnetic resonance simulations.”, *Journal of Magnetism and Magnetic Materials*, 421, 428-439, (2017).
- Ashton G., Jones D. I., and Prix R. “Comparing models of the periodic variations in spin-down and beam-width for PSR B1828-11”, *Monthly Notices of the Royal Astronomical Society*, 458.1, 881-899, (2016).
- Ashton G., Jones D. I., and Prix R. “Effect of timing noise on targeted and narrow-band coherent searches for continuous gravitational waves from pulsars”, *Physical Review D*, 91.6, 062009, (2015).
- Aasi J., et al. (LIGO Scientific Collaboration and Virgo Collaboration) “Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data”; *Physical Review D*, 91.2, 022004, (2015).

Other publications

- Ashton G., Birnholtz O., Cabero M., et al. ‘Comments on: “Echoes from the abyss: Evidence for Planck-scale structure at black hole horizons” ’; *arXiv:1612.05625*
- G. Ashton “Timing variations in neutron stars: models, inference and their implications for gravitational waves”; *PhD Thesis* (2016)
- Ashton G. “The effect of timing noise on continuous gravitational wave searches”; *article contributed to the Institute of Physics Gravitational Physics Group 2015 newsletter*

Employment

January 2018	<i>Assistant lecturer</i> : 3-year fixed term postdoctoral, School of Physics and Astronomy, Monash University, Melbourne (AU).
August 2016	<i>Wissenschaftler (scientist)</i> : 2-year fixed term postdoctoral researcher, Albert Einstein Institute, Hannover (DE).

Education

2012 - 2016	PhD in Mathematics, University of Southampton (UK) and Albert Einstein Institute, Hannover (DE). Awarded 29 th July 2016.
2008 - 2012	MPhys, 1 st class (Hons), University of Southampton (UK).
2006 - 2008	A Levels in Physics, Mathematics, and Music (AAC), Ferndown Upper School Sixth Form.

Conferences, seminars, and workshops

- April 2018: Invited talk at Institute for Nuclear theory workshop “Astro-Solids, Dense Matter, and Gravitational Waves” (Seattle, US).
- December 2017: Invited talk at the 11th Bonn workshop on “Formation and evolution of neutron stars: neutron stars in future research” (Bonn, Germany).
- June 2017: Aspen Center for Physics summer workshop “Neutron Stars: Linking Nuclear Physics of the Interior to Electromagnetic Observations and Gravitational Radiation” (Aspen, US).
- March 2017: Presented at NewCompStar (Warsaw, Poland).
- March 2017: Presented at the LIGO and Virgo conference continuous waves face-to-face meeting (Pasadena, USA).
- March 2017: Invited seminar at Glasgow University (Glasgow, UK).
- August 2016: Presented at the LIGO and Virgo conference continuous waves face-to-face meeting (Glasgow, UK).
- April 2016: Presented at NewCompStar, awarded best student talk (Istanbul, Turkey).
- June 2015: Presented at NewCompStar (Budapest, Hungary).
- April 2015: Presented at BritGrav (Birmingham, UK).
- March 2014: Presented at BritGrav, awarded 2nd place student talk (Cambridge, UK).

Other Academic Achievements

- Co-chair of the OzGrav program for Inference 2018
- Member of the LIGO Scientific Collaboration
- Member of the ARC centre of excellence for gravitational wave discovery (OzGrav)

References

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