List of Publications

Dr. Jessica McIver

Dated October 2017

*Indicates refereed publications

1. *The impact of transient noise on the parameter estimation of gravitational waves from binary black holes*. J. McIver et al. In prep.
2. * *GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral*. B.P. Abbott et al. PRL 119, 161101 (2017) - PAPER WRITING TEAM MEMBER
3. * *Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914*. B. P. Abbott et al. Class. Quantum Grav. 33 134001 (2016) - LEAD AUTHOR
4. *Effects of transients in LIGO suspensions on searches for gravitational waves*. M. Walker, T. D. Abbott, S. M. Aston, G. González, D. M. Macleod, J. McIver, et al. Submitted to the Review of Scientific Instruments. (2017)
5. *Effects of Data Quality Vetoes on a Search for Compact Binary Coalescences in Advanced LIGO's First Observing Run*. B.P. Abbott et al. Submitted to Class. Quantum Grav. (2017)
6. * *Observation of Gravitational Waves from a Binary Black Hole Merger*. B. P. Abbott et al. PRL 116, 061102 (2016)
7. * *Upper limits on the rates of binary neutron star and neutron-star--black-hole mergers from Advanced LIGO's first observing run*. B.P. Abbott et al. Ap. J. Letters 832, 2 (2016)
8. * *Multi-messenger Observations of a Binary Neutron Star Merger*. B.P. Abbott et al. Ap. J. Letters 848, 2. (2017)
9. * *Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A*. B.P. Abbott et al. Ap. J. Letters 848, 2 (2017)
10. * *A gravitational-wave standard siren measurement of the Hubble constant*. B.P. Abbott et al. Nature doi:10.1038/nature24471 (2017)
11. * *GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence*. B.P. Abbott et al. PRL 119, 141101 (2017)
12. * *GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2*. B. P. Abbott et al. PRL 118, 221101 (2017)
13. * *GW151226: Observation of Gravitational Waves from a 22 Solar-mass Binary Black Hole Coalescence*. B. P. Abbott et al. PRL 116, 241103 (2016)
14. * *Binary Black Hole Mergers in the first Advanced LIGO Observing Run*. B.P. Abbott et al. Phys. Rev. X 6, 041015 (2016)
15. * *Upper limits on the rates of binary neutron star and neutron-star--black-hole mergers from Advanced LIGO's first observing run*. B.P. Abbott et al. Ap. J. Letters 832, 2. (2016)
16. * *All-sky search for short gravitational-wave bursts in the first Advanced LIGO run*. B.P. Abbott et al. Phys. Rev. D 95, 042003 (2017)

17. * *Observing gravitational-wave transient GW150914 with minimal assumptions*. B.P. Abbott et al. Phys. Rev. D 93, 122004 (2016)

18. * *GW150914: First results from the search for binary black hole coalescence with Advanced LIGO*. B.P. Abbott et al. Phys. Rev. D 93, 122003 (2016)

19. * *Improving the data quality of Advanced LIGO based on early engineering run results*. L. Nuttall et al. Class. Quant. Grav. 32 (2015)

20.* *Characterization of the LIGO detectors during their sixth science run*. J. Aasi, et. al. Class. Quant. Grav. 32 115012 (2015)

21.* *Seismic isolation of Advanced LIGO: Review of strategy, instrumentation and performance*. F. Matichard et al. Class. Quant. Grav. 32 185003 (2015)

22. * *Data Quality Studies of Enhanced Interferometric Gravitational Wave Detectors*. Jessica McIver, for the LIGO Scientific Collaboration and the Virgo Collaboration. Class. Quantum Grav. 29 124010 (2012)

23. * *All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run*. J. Abadie et al. Phys. Rev. D 85, 122007 (2012)

24. * *Search for gravitational waves from binary black hole inspiral, merger, and ring-down in LIGO- Virgo data from 2009-2010*. J. Aasi et. al. Phys. Rev. D 87, 022002 (2012)

25. * *Search for gravitational waves from low mass compact binary coalescence in LIGO's sixth science run and Virgo's science runs 2 and 3*. J. Abadie et al. Phys. Rev. D 85, 082002 (2012)

26.* *A hierarchical method for vetoing noise transients in gravitational-wave detectors*. Joshua R Smith, Thomas Abbott, Eiichi Hirose, Nicolas Leroy, Duncan Macleod, Jessica McIver, Peter Saulson, Peter Shawhan. Class. Quantum Grav. 28 235005 (2011)

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27. *GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences*. Submitted.

28. *First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data*. B.P. Abbott et al. Submitted.

29. *First search for nontensorial gravitational waves from known pulsars*. B.P. Abbott et al. Submitted.

30. *First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data*. B.P. Abbott et al. Submitted.

31. *Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory*. arXiv 1710.05839 (2017)

32. * *On the Progenitor of Binary Neutron Star Merger GW170817*. B.P. Abbott et al. Accepted for publication in Ap. J. Letters (2017)

33. * *Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817*. B.P. Abbott et al. Accepted for publication in Ap. J. Letters (2017)

34. * *All-sky Search for Periodic Gravitational Waves in the O1 LIGO Data*. B.P. Abbott et al. Phys. Rev. D 96, 062002 (2017)

35. * *Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-Based Cross-Correlation Search in Advanced LIGO Data*. B.P. Abbott et al. Ap. J. 847, 1 (2017)

36. * *Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO*. B.P. Abbott et al. Phys. Rev. D 96, 022001 (2017)

37. * *Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO observing run with a hidden Markov model*. B.P. Abbott et al. Phys. Rev. D 95, 122003 (2017)

38. * *Quantum correlation measurements in interferometric gravitational wave detectors*. D. V. Martynov et al. Phys. Rev. A 95, 043831 (2017)

39. * *First search for gravitational waves from known pulsars with Advanced LIGO*. B.P. Abbott et al. Ap. J. 389, 1 (2017)

40. * *Directional limits on persistent gravitational waves from Advanced LIGO's first observing run*. B.P. Abbott et al. PRL 118, 121102 (2017)

41. * *Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run*. B.P. Abbott et al. PRL 118, 121101 (2017). Erratum PRL 119, 029901 (2017)

42. * *Search for Gravitational Waves Associated with Gamma-Ray Bursts During the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B*. B.P. Abbott et al. Ap. J. 841, 2 (2017)

43. * *Effects of waveform model systematics on the interpretation of GW150914*. B.P. Abbott et al. Class. Quantum Grav. 34, 10 (2017)

44. * *Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544*. B.P. Abbott et al. Phys. Rev. D 95, 082005 (2017)

45. * *The basic physics of the binary black hole merger GW150914*. B.P. Abbott et al. Annalen der Physik, Volume 529, Issue 1-2 (2017)

46. * *Exploring the Sensitivity of Next Generation Gravitational Wave Detectors*. B.P. Abbott et al. CQG 34, 4 (2017)

47. * *Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence*. B.P. Abbott et al. Phys. Rev. D 94, 064035 (2016)

48. * *An improved analysis of GW150914 using a fully spin-precessing waveform model*. B.P. Abbott et al. Phys. Rev. X 6, 041014 (2016)

49. * *Comprehensive All-sky Search for Periodic Gravitational Waves in the Sixth Science Run LIGO Data*. B.P. Abbott et al. Phys. Rev. D 94, 042002 (2016)

50. * *A First Targeted Search for Gravitational-Wave Bursts from Core-Collapse Supernovae in Data of First-Generation Laser Interferometer Detectors*. B.P. Abbott et al. Phys. Rev. D 94, 102001 (2016)

51. * *Search for transient gravitational waves in coincidence with short duration radio transients during 2007-2013*. B.P. Abbott et al. Phys. Rev. D 93, 122008 (2016)

52. * *The Sensitivity of the Advanced LIGO Detectors at the Beginning of Gravitational Wave Astronomy*. D.V. Martynov et al. Phys. Rev. D 93, 112004 (2016)

53. * *Localization and broadband follow-up of the gravitational-wave transient GW150914*. B.P. Abbott et al. Ap. J. Letters 826, 13 (2016)

54. * *Supplement: Localization and broadband follow-up of the gravitational-wave transient GW150914*. B.P. Abbott et al. Ap. J. S. 225, 8 (2016)

55. * *High-energy Neutrino follow-up search of Gravitational Wave Event GW150914 with ANTARES and IceCube*. B.P. Abbott et al. Phys. Rev. D 93, 122010 (2016)

56. Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914. B.P. Abbott et al. arXiv:1602.03845 (2016)

57. * *The Rate of Binary Black Hole Mergers Inferred from Advanced LIGO Observations Surrounding GW150914*. B.P. Abbott et al. Ap. J. Letters 833, 1 (2016)

58. * *GW150914: Implications for the stochastic gravitational wave background from binary black holes*. B.P. Abbott et al. Phys. Rev. Lett. 116, 131102 (2016)

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61. * *GW150914: The Advanced LIGO Detectors in the Era of First Discoveries*. B.P. Abbott et al. (The LIGO Scientific Collaboration and the Virgo Collaboration) Phys. Rev. Lett. 116, 131103 (2016)

62. * *Supplement: The Rate of Binary Black Hole Mergers Inferred from Advanced LIGO Observations Surrounding GW150914*. B.P. Abbott et al. Ap. J. S. 227, 14, 2016

63. * *Properties of the Binary Black Hole Merger GW150914*. B.P. Abbott et al. Phys. Rev. Lett. 116, 241102 (2016)

64. * *A search of the Orion spur for continuous gravitational waves using a "loosely coherent" algorithm on data from LIGO interferometers*. J Aasi et al. Phys. Rev. D 93, 042006 (2016)

65. * *First low frequency all-sky search for continuous gravitational wave signals*. J Aasi et al. Phys. Rev. D 93, 042007 (2016)

66. * *An all-sky search for long-duration gravitational wave transients with LIGO*. B. P. Abbott et al. Phys. Rev. D 93, 042005 (2016)

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72. * *Searches for continuous gravitational waves from nine young supernova remnants.* J. Aasi et al. ApJ 813, 1 (2015)

73. * *The NINJA-2 project: Detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations.* J. Aasi *et al.* Class. Quantum Grav. 31, 115004 (2014)

74. * *Application of a Hough search for continuous gravitational waves on data from the fifth LIGO science run.* J. Aasi *et al.* Class. Quantum Grav. 31, 085014 (2014)

75. * *Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors.* J. *Aasi et al.* Phys. Rev. Lett. 112, 131101 (2014)

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80. * *First all-sky search for continuous gravitational waves from unknown sources in binary systems*. J. Aasi *et al.* Phys. Rev. D 90, 062010 (2014)

81. * *Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors*. J. Aasi *et al.* Phys. Rev. D 89, 122004 (2014)

82. * *Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run*. J. Aasi *et al.* Phys. Rev. D 89, 122003 (2014)

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88. * *A directed search for continuous Gravitational Waves from the Galactic Center.* J. Aasi *et al.* Phys. Rev. D 88, 102002 (2013)

89. * *Search for long-lived gravitational-wave transients coincident with long gamma-ray burst*s. J. Aasi *et al.* Phys. Rev. D 88, 122004 (2013)

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91.* *Implications for the Origin of GRB 051103 from LIGO Observations*. J. Abadie *et al.* ApJ 755 2 (2012)

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95.* *Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600–1000 Hz*. J. Abadie *et al.* Phys. Rev. D 85, 122001 (2012)