CURRICULUM VITAE

Jishnu Suresh

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POSITIONS HELD

2019 – Post Doctoral Fellow
Institute for Cosmic Ray Research (ICRR), University of Tokyo,
Kashiwa, Japan

2016 – 2019 Post Doctoral Fellow
Inter-University Centre for Astronomy and Astrophysics (IUCAA),
Pune, India.

EDUCATION

2016 Ph. D.
Cochin University of Science and Technology (CUSAT), Kochi, India.
Title: "Thermodynamics and Geometrothermodynamics of black holes in modified theories of gravity"
Supervisor: Prof. V. C. Kuriakose

2012 Master of Science,
Department of Physics, Cochin University of Science and Technology, Kochi, India.

2010 Bachelor of Science,
Govt. College Madappally, Department of Physics, University of Calicut, Calicut, India.

FELLOWSHIPS AND AWARDS

2012 University Grant Commission major research fellowship, Department of Physics, Cochin University of Science and Technology, Kochi, India.

2012 Qualified the Graduate Aptitude Test in Engineering (GATE), conducted by the Ministry of Human Resource Development (MHRD).

SUPERVISION OF GRADUATE STUDENTS AND PROJECT FELLOWS

2018 3-Master Students:
Sambit Panda – BITS Pilani, Rajasthan, India.
Anitta Sunny – Calicut University, Kerala, India.
Radhika Manoj – Calicut University, Kerala, India. (Now, Ph. D student at University of Delhi, Delhi, India)

2017 1-Master Student:
Mahith Madankumar - Cochin University of Science and Technology, Kochi, India. (Now, Ph. D student at University of New Brunswick)

2015 2-Master Students:

Masroor CP – Mahathma Gandhi University, Kottayam, India. (Now, Ph. D student at YITP, Kyoto University, Kyoto, Japan)

Geethu Prabhakar – Mahathma Gandhi University, Kottayam, India. (Now, Ph. D student at IIST, Trivandrum, Kerala, India)

TEACHING ACTIVITIES

2017	Tutor - General relativity, Pune University Masters course, Pune, India.
2016	Tutor - Group theory and Advanced mathematical techniques, Cochin University of Science and Technology, Kochi, India.
2015	Tutor - General relativity, Cochin University of Science and Technology, Kochi, India.

ORGANISATION OF SCIENTIFIC MEETINGS

2015	Co-organizer, Gravitational Wave Workshop, Cochin University of Science and Technology, Kochi, India.
2015	Co-organizer, School on Gravitation and Cosmology-II, Cochin University of Science and Technology, Kochi, India.
2014	Co-organizer, School on Gravitation and Cosmology-I, Cochin University of Science and Technology, Kochi, India.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2019	Member, KAGRA collaboration since 2019
2019	Member, International Society on General Relativity and Gravitation (ISGRG) since 2019
2018	Member, Indian Association for General Relativity and Gravitation (IAGRG) since 2018
2016	Member, LIGO-Scientific Collaboration (LSC) since 2016

MAJOR COLLABORATIONS

2019 -	KAGRA collaboration
2016 -	LIGO Scientific Collaboration
2016 – 2019	Indigo Consortium, LIGO-India

TRACK RECORD

- Co-developer of a very fast python based stochastic gravitational wave background data analysis pipeline, named 'PyStoch' (LVK collaboration is using this pipeline for directional searches for persistent gravitational wave sources).
- Co-developer of enhanced PyStoch pipeline which can perform analysis in pixel and spherical harmonic bases.
- Delivered the folded data set of each scientific and observational run of LIGO and Virgo to the LVK collaboration (delivered S5, O1, O2 and O3 data sets)
- Contributor to the new analysis called all-sky-all-frequency (ASAF) analysis as a combined stochastic-continuous wave group effort.
- Contributed to the offline Parameter Estimation Rota (PERota) for the gravitational wave candidates in third observation run (O3).
- Contributed to the KAGRA detector's data quality shift during the observing run preparation.
- Part of the upcoming LVK stochastic directional search paper writing and analysis team.
- Extended the idea of Geometrothermodynamics (incorporating differential geometry idea to the black hole thermodynamics) to modified theories of gravity.

PRESENTATIONS/ATTENDENCE IN CONFERNCES AND MEETINGS

- (presenter), Component separation in Stochastic Gravitational Wave Background searches, *J. Suresh*, A. Parida and S. Mitra, GW Physics and Astronomy Symposium: Genesis Symposium, 10-02-2020 to 12-02-2020, Konan University, Kobe, Japan.

- (presenter), Stochastic Gravitational Wave Background map making techniques, *J. Suresh*, Gravitational Wave Physics and Astronomy Workshop (GWPAW), 14-10-2019 to 17-10-2019, RESCEU, The University of Tokyo, Japan.

- (presenter), Stochastic Gravitational Wave Background Mapmaking using regularized deconvolution, *J. Suresh*, S. Panda, S. Bhagwat and S. Mitra, Topics in Astroparticle and Underground Physics (TAUP), 09-09-2019 to 13-09-2019, Toyama International Conference Center, Toyama, Japan.

- (presenter-poster), PyStoch: Stochastic gravitational wave background map-making tool, *J. Suresh*, A.Ain, S. Sudhagar and S. Mitra, 22nd International Conference on General Relativity and Gravitation 13th Edoardo Amaldi Conference on Gravitational Waves, 07-07-2019 to 12-07-2019, Valencia, Spain.

- (presenter), PyStoch and Folded data set for O3 analysis, *J. Suresh*, LIGO-Virgo Collaboration meeting, 18-03-2019 to 21-03-2019, Lake Geneva, Wisconsin.

- (presenter-poster), Stochastic Gravitational Wave Background map-making, *J. Suresh*, A.Ain and S. Mitra, Multi-messenger astronomy in the era of LIGO-India, 15-01-2019 to 18-01-2019, Khandala, Pune, India.

- (presenter), O2 folded data set, PyStoch and O3 plans, *J. Suresh* and S. Mitra, LIGO-Virgo Collaboration meeting, 04-09-2018 to 07-09-2018, Maastricht University, Maastricht.

- (panelist), Physics and Astrophysics at the eXtreme (PAX) meeting, Cosmology and gravitation session, 07-08-2018 to 10-08-2018, IUCAA, Pune

- (contributor), Efficient Techniques to Probe Stochastic Gravitational Wave Background Anisotropy with Ground-based Detectors, A. Ain, *J. Suresh* and S. Mitra, Fifteenth Marcel Grossmann Meeting – MG15, 01-07-2018 to 07-07-2018, University of Rome “La Sapienza", Rome.

- (presenter), O1/O2 folded data set and PyStoch updates, *J. Suresh* and S. Mitra, LIGO-Virgo Collaboration meeting, 19-03-2018 to 22-03-2018, Sonoma State University, Sonoma.

- (contributor), Efficient mapmaking of the stochastic gravitational wave background, A. Ain and *J. Suresh*, 03-09-2017 to 05-09-2017, INFN-Pisa, Pisa.

- (contributor), Updates on PyStoch, A. Ain and *J. Suresh*, LIGO-Virgo Collaboration meeting, 28-08-2017 to 01-09-2017, CERN, Geneva.

LIMITED AUTHOR PUBLICATIONS

(included collaboration wide papers where I made significant contribution)

1. Unified Mapmaking for Anisotropic Stochastic Gravitational Wave Background,
J. Suresh, A. Ain, S. Mitra
arxiv: 2011.05969[qr-qc], 10.1103/PhysRevD.103.083024
Phys. Rev. D 103, 083024 (2021)

2. Stochastic gravitational wave background mapmaking using regularized deconvolution,

S. Panda, S. Bhagwat, J. Suresh, S. Mitra
arXiv:1905.08276 [gr-qc], 10.1103/PhysRevD.100.043541.
Phys. Rev. D 100 (2019) no.4, 043541

3. Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs,
Abbott, B.P. and others (LIGO Scientific and Virgo Collaborations)
arXiv:1903.08844 [gr-qc], 10.1103/PhysRevD.100.062001.
Phys. Rev. D 100 (2019) no.6, 062001

4. Very fast stochastic gravitational wave background map making using folded data,
A. Ain, J. Suresh, S. Mitra.
arXiv:1803.08285 [gr-qc], 10.1103/PhysRevD.98.024001.
Phys.Rev. D98 (2018) no.2, 024001.

5. Component separation map making for stochastic gravitational wave background,
A. Parida, J. Suresh, S. Mitra, S. Jhingan
arXiv:1904.05056 [gr-qc]

6. Geometrothermodynamics of BTZ black hole in new massive gravity
Jishnu Suresh, V.C. Kuriakose.
arXiv:1606.06098 [gr-qc].

7. Entropy spectrum of BTZ black hole in massive gravity
Jishnu Suresh, V.C. Kuriakose.
arXiv:1605.00142 [gr-qc].

8. Thermodynamics and Geometrothermodynamics of Charged black holes in Massive Gravity
Jishnu Suresh, C. P. Masroor, Geethu Prabhakar, V. C. Kuriakose.
arXiv:1603.00981 [gr-qc].

9. Thermodynamics of Charged Lovelock - AdS Black Holes
C.B. Prasobh, Jishnu Suresh, V. C. Kuriakose.
arXiv:1510.04784 [gr-qc], 10.1140/epjc/s10052-016-4062-4.
Eur.Phys.J. C76 (2016) no.4, 207.

10. Entropy spectrum of (1+1) dimensional stringy black holes
Jishnu Suresh, V.C. Kuriakose.
arXiv:1501.04852 [gr-qc], 10.1140/epjc/s10052-015-3444-3.
Eur.Phys.J. C75 (2015) no.5, 214.

11. A unified thermodynamic picture of Hořava-Lifshitz black hole in arbitrary space time
Jishnu Suresh, R. Tharanath, V.C. Kuriakose.
arXiv:1408.0911 [gr-qc], 10.1007/JHEP01(2015)019.
JHEP 1501 (2015) 019.

12. Phase transitions and Geometrothermodynamics of Regular black holes
R. Tharanath, Jishnu Suresh, V.C. Kuriakose.

arXiv:1406.3916 [gr-qc], 10.1007/s10714-015-1884-6.
Gen.Rel.Grav. 47 (2015) no.4, 46.

13. Thermodynamic Geometry of Reissener-Nordstrom-de Sitter black hole and its extremal case
R. Tharanath, Jishnu Suresh, Nijo Varghese, V.C. Kuriakose.
arXiv:1404.6789 [gr-qc], 10.1007/s10714-014-1743-x.
Gen.Rel.Grav. 46 (2014) 1743.

14. The thermodynamics and thermodynamic geometry of the Park black hole
Jishnu Suresh, R. Tharanath, Nijo Varghese, V.C. Kuriakose.
arXiv:1403.4710 [gr-qc], 10.1140/epjc/s10052-014-2819-1.
Eur.Phys.J. C74 (2014) 2819.

15. Thermodynamics and quasinormal modes of Park black hole in Horava gravity
Jishnu Suresh, V.C. Kuriakose.
arXiv:1310.2011 [gr-qc], 10.1140/epjc/s10052-013-2613-5.
Eur.Phys.J. C73 (2013) no.10, 2613.

16. Area spectrum and thermodynamics of KS black holes in Horava gravity
Jishnu Suresh, V.C. Kuriakose.
arXiv:1307.6438 [gr-qc], 10.1007/s10714-013-1565-2.
Gen.Rel.Grav. 45 (2013) 1877-1886.

17. Modified holographic Ricci dark energy model and state finder diagnosis in flat universe
Titus K. Mathew, Jishnu Suresh, Divya Divakaran.
arXiv:1207.5886 [astro-ph.CO], 10.1142/S0218271813500569.
Int.J.Mod.Phys. D22 (2013) 1350056.

***LIGO Scientific, Virgo and KAGRA Collaboration wide papers are listed towards the end!*

REFERENCE

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   Director of Research at CNRS
   Laboratoire d'Annecy de Physique des Particules (LAAP)
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Email: regimbau@lapp.in2p3.fr

LIGO-VIRGO-KAGRA COLLABORATION PUBLICATIONS

1. Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA, B.P. Abbott (LIGO Lab., Caltech) et al.[KAGRA and LIGO Scientific and Virgo Collaborations], Living Rev.Rel. 23 (2020) 1, 3, DOI: 10.1007/s41114-020-00026-9
2. Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer, T. Akutsu (Natl. Astron. Observ. of Japan) et al. [KAGRA Collaboration], arXiv: 2009.09305 [gr-qc]
3. GW190521: A Binary Black Hole Merger with a Total Mass of 150 Msun, R. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett.125 (2020) no.10, 101102, arXiv:2009.01075 [gr-qc].
4. Properties and astrophysical implications of the 150 Msun binary black hole merger GW190521, R. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 900 (2020), L1, arXiv:2009.01190 [astro-ph.HE].
5. Overview of KAGRA : KAGRA science, T. Akutsu et al. [KAGRA], arXiv:2008.02921 [gr-qc].
6. Gravitational-wave constraints on the equatorial ellipticity of millisecond pulsars, R. Abbott et al. [LIGO Scientific and Virgo], arXiv:2007.14251 [astro-ph.HE].
7. GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object, R. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 896 (2020) no.2, L44, arXiv:2006.12611 [astro-ph.HE].
8. GW190412: Observation of a Binary-Black-Hole Coalescence with Asymmetric Masses, R. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 102 (2020) no.4, 043015, arXiv:2004.08342 [astro-ph.HE].
9. GW190425: Observation of a Compact Binary Coalescence with Total Mass~ 3.4 Msun, R. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 892 (2020) no.1, L3, arXiv:2001.01761 [astro-ph.HE].
10. A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers From the First and Second Gravitational-wave Observing Runs, R.Hamburg et al. [Fermi Gamma-ray Burst Monitor Team, LIGO Scientific and Virgo], Astrophys. J. 893 (2020), 100, arXiv:2001.00923 [astro-ph.HE].
11. A gravitational-wave measurement of the Hubble constant following the second observing run of Advanced LIGO and Virgo, B. P. Abbott et al. [LIGO Scientific and Virgo], arXiv:1908.06060 [astro-ph.CO].
12. Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 101 (2020) no.8, 084002, arXiv:1908.03584 [astro-ph.HE].
13. Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during their First and Second Observing Runs, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 883 (2019) no.2, 149, arXiv:1907.09384 [astro-ph.HE]
14. Search for gravitational-wave signals associated with gamma-ray bursts during the second observing run of Advanced LIGO and Advanced Virgo, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 886 (2019), 75, arXiv:1907.01443 [astro-ph.HE].
15. Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 100 (2019) no.12, 122002, arXiv:1906.12040 [gr-qc].

16. Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 10 (2019) no.6, 064064, arXiv:1906.08000 [gr-qc].
17. All-Sky Search for Short Gravitational-Wave Bursts in the Second Advanced LIGO and Advanced Virgo Run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 100 (2019) no.2, 024017, arXiv:1905.03457 [gr-qc].
18. Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO Second Observing Run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 123 (2019) no.16, 161102, arXiv:1904.08976 [astro-ph.CO].
19. All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 99 (2019) no.10, 104033, arXiv:1903.12015 [gr-qc].
20. Tests of General Relativity with the Binary Black Hole Signals from the LIGO-Virgo Catalog GWTC-1, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 100 (2019) no.10, 104036, arXiv:1903.04467 [gr-qc].
21. Search for the isotropic stochastic background using data from Advanced LIGO second observing run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 100 (2019) no.6, 061101, arXiv:1903.02886 [gr-qc].
22. All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 100 (2019) no.2, 024004, arXiv:1903.01901 [astro-ph.HE].
23. Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 879 (2019) no.1, 10, arXiv:1902.08507 [astro-ph.HE].
24. Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 99 (2019) no.12, 122002, arXiv:1902.08442 [gr-qc].
25. Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO Second Observing Run, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 874 (2019) no.2, 163, arXiv:1902.01557 [astro-ph.HE].
26. Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 875 (2019) no.2, 161, arXiv:1901.03310 [astro-ph.HE].
27. First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary Black-hole Merger GW170814, M. Soares-Santos et al. [DES, LIGO Scientific and Virgo], Astrophys. J. Lett. 876 (2019) no.1, L7, arXiv:1901.01540 [astro-ph.CO].
28. Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 875 (2019) no.2, 122, arXiv:1812.11656 [astro-ph.HE].
29. GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. X 9 (2019) no.3, 031040, arXiv:1811.12907 [astro-ph.HE].
30. Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 882 (2019) no.2, L24, arXiv:1811.12940 [astro-ph.HE].
31. Tests of General Relativity with GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 123 (2019) no.1, 011102, arXiv:1811.00364 [gr-qc].

32. Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube, A. Albert et al. [ANTARES, IceCube, LIGO and Virgo], Astrophys. J. 870 (2019) no.2, 134, arXiv:1810.10693 [astro-ph.HE].
33. Fermi Gamma-ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-Wave Candidates in Advanced LIGO's First Observing Run, E. Burns et al. [Fermi Gamma-ray Burst Monitor Team, LIGO Scientific and Virgo], Astrophys. J. 871 (2019) no.1, 90, arXiv:1810.02764 [astro-ph.HE].
34. Search for gravitational waves from a long-lived remnant of the binary neutron star merger GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. 875 (2019) no.2, 160, arXiv:1810.02581 [gr-qc].
35. Constraining the p-Mode--g-Mode Tidal Instability with GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 122 (2019) no.6, 061104, arXiv:1808.08676 [astro-ph.HE].
36. Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO First Observing Run, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 121 (2018) no.23, 231103, arXiv:1808.04771 [astro-ph.CO].
37. GW170817: Measurements of neutron star radii and equation of state, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 121 (2018) no.16, 161101, arXiv:1805.11581 [gr-qc].
38. Properties of the binary neutron star merger GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. X 9 (2019) no.1, 011001, arXiv:1805.11579 [gr-qc].
39. Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 120 (2018) no.20, 201102, arXiv:1802.10194 [gr-qc].
40. Full Band All-sky Search for Periodic Gravitational Waves in the O1 LIGO Data, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 97 (2018) no.10, 102003, arXiv:1802.05241 [gr-qc].
41. GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 120 (2018) no.9, 091101, arXiv:1710.05837 [gr-qc].
42. Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory, A. Albert et al. [ANTARES, IceCube, Pierre Auger, LIGO Scientific and Virgo], Astrophys. J. Lett. 850 (2017) no.2, L35, arXiv:1710.05839 [astro-ph.HE].
43. Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 850 (2017) no.2, L39, arXiv:1710.05836 [astro-ph.HE].
44. Gravitational Waves and Gamma-rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A, B. P. Abbott et al. [LIGO Scientific, Virgo, Fermi-GBM and INTEGRAL], Astrophys. J. Lett. 848 (2017) no.2, L13, arXiv:1710.05834 [astro-ph.HE].
45. A gravitational-wave standard siren measurement of the Hubble constant, B. P. Abbott et al. [LIGO Scientific, Virgo, 1M2H, Dark Energy Camera GW-E, DES, DLT40, Las Cumbres Observatory, VINROUGE and MASTER], Nature 551 (2017) no.7678, 85-88, arXiv:1710.05835 [astro-ph.CO].
46. On the Progenitor of Binary Neutron Star Merger GW170817, B. P. Abbott et al. [LIGO Scientific and Virgo], Astrophys. J. Lett. 850 (2017) no.2, L40, arXiv:1710.05838 [astro-ph.HE].

47. GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. Lett. 119 (2017) no.16, 161101, arXiv:1710.05832 [gr-qc].
48. First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data, B. P. Abbott et al. [LIGO Scientific and Virgo], Phys. Rev. D 96 (2017) no.12, 122006, arXiv:1710.02327 [gr-qc].