CURRICULUM VITAE

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POSITIONS HELD

2021 – Post Doctoral Fellow
Centre for Cosmology, Particle Physics and Phenomenology (CP3),
Université catholique de Louvain,
Ottignies-Louvain-la-Neuve, Belgium.

2019 – 2021 Post Doctoral Fellow
Institute for Cosmic Ray Research (ICRR), The 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.
Project Title: “Modified holographic Ricci dark energy model and statefinder diagnosis in flat universe”
Supervisor: Prof. Titus. K. Mathew

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

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2021 Member, American Astronomical Society.
2019 Member, International Society on General Relativity and Gravitation (ISGRG)
2018 Member, Indian Association for General Relativity and Gravitation (IAGRG)

MAJOR COLLABORATIONS

2021 - Virgo collaboration
2019 - KAGRA collaboration
2016 - LIGO collaboration
2016 – 2019 Indigo Consortium, LIGO-India

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

2020 Co-organizer, Astronomy Society of Kerala: VCK memorial workshop-II,
UC College, Aluva, Kerala, India.
2019 Co-organizer, Astronomy Society of Kerala: VCK memorial workshop-I,
UC College, Aluva, Kerala, India.

2016 Co-organizer/Resource person, School on Gravitation and Cosmology-II,
Cochin University of Science and Technology, Kochi, India.

2015 Co-organizer/Resource person, School on Gravitation and Cosmology-I,
Cochin University of Science and Technology, Kochi, India.

2014 Co-organizer/Resource person, Recent Developments in Cosmology,
IUCAA resource centre and SH college, Kochi, India.

TRACK RECORD

- Anisotropic sub-group chair inthe LIGO-Virgo-KAGRA stochastic group.
- Paper writing team chair for the LIGO-Virgo-KAGRA all-sky-all-frequency stochastic gravitational-wave analysis.
- Working on the synergies between Stochastic gravitational wave background and other electromagnetic tracers.
- Delivered the folded data set of each observational run of LIGO and Virgo to the LIGO-Virgo-KAGRA collaboration for the analysis (delivered O1, O2, and O3 data sets). These data sets were made available to the public recently.
- Co-developer of a python-based stochastic gravitational-wave background data analysis pipeline, 'PyStoch' (LIGO-Virgo-KAGRA collaboration used this pipeline for the directional searches for persistent gravitational wave sources).
- Co-developed a new unified-PyStoch pipeline, that can perform the stochastic gravitational-wave searches in pixel and spherical harmonic bases.
- Contributed to the LIGO-Virgo-KAGRA stochastic directional search analysis (for second and third observing run) and the subsequent paper writing team.
- Contributed to the offline gravitational-wave candidate Parameter Estimation Rota (PERota) in the third observation run (O3).
- Contributed to the KAGRA data quality shift during the preparations for the third observing run.

- Extended the ideas of Geometrothermodynamics (incorporating differential geometry ideas to the black hole thermodynamics) to modified theories of gravity.

PRESENTATIONS/ATTENDANCE IN CONFERENCES AND MEETINGS

- (presenter), Stochastic gravitational wave searches, Gravitational Wave and Exoplanet Colloquium, Belgian National Committee for Pure and Applied Physics, April 2, 2022 at the Royal Academy, Brussels.

- (presenter), All-sky, all-frequency directional search for persistent gravitational-waves from Advanced LIGO's and Advanced Virgo's first three observing runs, Virgo Week, 15-11-2021 to 18-11-2021, EGO, Pisa, Italy.

- (presenter), Jointly setting upper limits on multiple components of an anisotropic stochastic gravitational-wave background, Belgian Gravitational-Wave Meeting, 03-11-2021, Université Libre de Bruxelles (ULB), Brussels, Belgium.

- (presenter), Jointly setting upper limits on multiple components of an anisotropic stochastic gravitational-wave background, 16th Marcel Grossmann Meetings (MG16), 05-07-2021 to 10-07-2021, Online.

- (presenter), Search for anisotropic gravitational-wave backgrounds using folded data, 4th annual symposium for the Innovative Area "Gravitational wave physics and astronomy: Genesis", 22-02-2021 to 24-02-2021, Online.

- (presenter), PyStoch: Stochastic Gravitational Wave Background searches, Japan General Relativity and Gravitation (JGRG) workshop, 23-11-2020 to 27-11-2020, Online.

- (presenter), PyStoch and Spherical Harmonic search, LIGO-Virgo-KAGRA (LVK) collaboration meeting, 14-09-2020 to 16-09-2020, Cardiff University, UK (online).

- (presenter), PyStoch and Folded data set for O3 analysis, LIGO-Virgo-KAGRA (LVK) collaboration meeting, 18-03-2020 to 21-03-2020, Leonard elbarker Center for Gravitation, Cosmology and Astrophysics, University of Wisconsin - Milwaukee, USA (online).

- (presenter), Component separation in Stochastic Gravitational Wave Background searches, 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, 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 regularised deconvolution, 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, 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, LIGO-Virgo Collaboration meeting, 18-03-2019 to 21-03-2019, Lake Geneva, Wisconsin.

- (presenter-poster), Stochastic Gravitational Wave Background map-making, 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, 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, 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, LIGO-Virgo Collaboration meeting, 19-03-2018 to 22-03-2018, Sonoma State University, Sonoma.

- (contributor), Efficient mapmaking of the stochastic gravitational wave background, 03-09-2017 to 05-09-2017, INFN-Pisa, Pisa.

- (contributor), Updates on PyStoch, LIGO-Virgo Collaboration meeting, 28-08-2017 to 01-09-2017, CERN, Geneva.

INVITED TALKS IN UNIVERSITIES AND COLLEGES

- Exploring the universe with gravitational waves, 22-11-2021, The New College (Autonomous), Department of Physics, Chennai, India.

- Gravitational waves: Murmur from the dark universe, 11-10-2021, Mar Thoma College, Department of Physics, Chungathara, Kerala, India.

- The universe and the gravitational waves, 09-10-2021, Bharata Mata College, Department of Physics, Thrikkakkara, Kerala, India.

- Stochastic gravitational-wave background map-making techniques, 02-02-2021, Centre for Cosmology, Particle Physics and Phenomenology, Université catholique de Louvain, Belgium.

- Murmur from the dark universe: Gravitational Waves, 07-01-2021, Government College Madappally, Department of Physics, Vadakara, Kerala, India.

- Gravitational Waves, 19-05-2020, Tele Science Program, Kerala State Education Board Initiative, Kerala, India.

- Murmur from the dark universe, 10-05-2020, St Paul's College, Department of Physics, Kalamassery, Kerala, India.

- Listening to the gravitational wave orchestra, 09-01-2020, Cochin University of Science and Technology, Department of Physics, Kochi, Kerala.

- Stochastic gravitational wave background map-making, 29-07-2019, Tamkang University, Taiwan.

- Stochastic gravitational wave background, 30-08-2019, Astronomy Society of Kerala, VCK memorial workshop, UC College, Aluva, Kerala, India.

- Efficient techniques to probe Stochastic Gravitational-Wave Background anisotropy with ground-based detectors, 16-04-2019, Kavli Institute for the Physics and Mathematics of the Universe (Kavli IPMU), The University of Tokyo, Japan.

- Efficient technique to probe Stochastic Gravitational Wave Background Anisotropy with ground-based detectors, 11-03-2019, The University of Tokyo, Institute for Cosmic Ray Research, Tokyo, Japan.

- Stochastic gravitational wave background, 09-07-2018, Cochin University of Science and Technology, Department of Physics, Kochi, Kerala, India.

- Stochastic gravitational wave background map-making, 02-12-2017, Regional Astronomy Meeting 2017, Wayanad, Kerala, India.

- What comes next from LIGO?, 08-08-2017, Cochin University of Science and Technology, Department of Physics, Kochi, Kerala, India.

LIMITED AUTHOR PUBLICATIONS

(included collaboration wide papers where I made significant contribution)

1. Stochastic gravitational-wave background searches and constraints on neutron-star ellipticity, F. DeLillo, J. Suresh, A. L. Miller, arXiv: 2203.03536 (accepted in MNRAS)

2. Gravitational-wave geodesy: Defining false alarm probabilities with respect to correlated noise,   J. Kamiel, T. A. Callister, N. Christensen, M. Coughlin, I. Michaloliakos, J. Suresh, Nv.Remortel, Phys. Rev. D 105, 082001 (2022)

3. Jointly setting upper limits on multiple components of an anisotropic stochastic gravitational-wave background, J. Suresh, D. Agarwal, S. Mitra, Phys. Rev. D 104, 102003 (2021).

4. Upper limits on persistent gravitational waves using folded data and the full covariance matrix from Advanced LIGO’s first two observing runs, D. Agarwal, J. Suresh, S. Mitra, A. Ain, Phys. Rev. D 104, 123018 (2021).

5. Gravitational-Wave Geodesy: Defining False Alarm Probabilities with Respect to Correlated Noise, K. Janssens, T. Callister, N. Christensen, M. W. Coughlin, I. Michaloliakos, J. Suresh, N. van Remortel, arXiv: 2112.03560 (2021).

6. All-sky, all-frequency directional search for persistent gravitational-waves from Advanced LIGO's and Advanced Virgo's first three observing runs, Abbott, B.P. and others (LIGO Scientific, Virgo Collaborations, and KAGRA collaboration), arXiv: 2110.09834 (2021).

7. Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgo’s first three observing runs, Abbott, B.P. and others (LIGO Scientific, Virgo Collaborations, and KAGRA collaboration), Phys. Rev. D 104, 022005 (2021).

8. Unified Mapmaking for Anisotropic Stochastic Gravitational Wave Background, J. Suresh, A. Ain, S. Mitra, arXiv: 2011.05969, Phys. Rev. D 103, 083024 (2021).

9. The science case for LIGO-India, S. Mohammed, R. Javed ,V. Gayathri, A. Vijaykumar, Aditya, S. Goyal, S. Sachdev, J. Suresh, S. Suyamprakasam, A. Mukherjee, G. Gaur, B. Sathyaprakash, A. Pai, R. Adhikari, P. Ajith, S. Bose, arXiv: 2105.01716, Class. Quantum. Grav. (2021), http://iopscience.iop.org/article/10.1088/1361-6382/ac3b99

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

11. Stochastic gravitational wave background mapmaking using regularized deconvolution, S. Panda, S. Bhagwat, J. Suresh, S. Mitra, arXiv:1905.08276 [gr-qc], Phys. Rev. D 100 (2019) no.4, 043541

12. 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], Phys. Rev. D 100 (2019) no.6, 062001

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

14. 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].

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

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

17. Thermodynamics of Charged Lovelock - AdS Black Holes, C.B. Prasobh, J. Suresh, V. C. Kuriakose, arXiv:1510.04784 [gr-qc], Eur.Phys.J. C76 (2016) no.4, 207.

18. Entropy spectrum of (1+1) dimensional stringy black holes, J. Suresh, V.C. Kuriakose, arXiv:1501.04852 [gr-qc], Eur.Phys.J. C75 (2015) no.5, 214.

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

20. Phase transitions and Geometrothermodynamics of Regular black holes, R. Tharanath, J. Suresh, V.C. Kuriakose, arXiv:1406.3916 [gr-qc], Gen.Rel.Grav. 47

(2015) no.4, 46.

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

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

23. Thermodynamics and quasinormal modes of Park black hole in Horava gravity, J. Suresh, V.C. Kuriakose, arXiv:1310.2011 [gr-qc], Eur.Phys.J. C73 (2013) no.10, 2613.

24. Area spectrum and thermodynamics of KS black holes in Horava gravity, J. Suresh, V.C. Kuriakose, arXiv:1307.6438 [gr-qc], Gen.Rel.Grav. 45 (2013) 1877-1886.

25. Modified holographic Ricci dark energy model and state finder diagnosis in flat universe, T. K. Mathew, J. Suresh, D. Divakaran, arXiv:1207.5886 [astro-ph.CO], Int.J.Mod.Phys. D22 (2013) 1350056.

REFERENCE

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1 . Giacomo Bruno

Professor,
Centre for Cosmology, Particle Physics and Phenomenology (CP3),
Université catholique de Louvain, Chemin du Cyclotron 2, Box L7.01.05 ,
Louvain-la-Neuve, Belgium-1348.

2. Hideyuki Tagoshi

Professor,
Institute for Cosmic Ray Research, The University of Tokyo,
Kashiwanoha 5-1-5, Kashiwa, Chiba 277-8582, Japan.

3. Sanjit Mitra

Associate Professor,
Inter-University Centre for Astronomy and Astrophysics (IUCAA),
Post Bag 4, Ganeshkind, Pune - 411007, India.

4. Vuk Mandic
Professor,
School of Physics and Astronomy, Minnesota Institute for Astrophysics,
Minneapolis, MN 55455, USA.

5. Tania Regimbau
Director of Research at CNRS,
Laboratoire d'Annecy de Physique des Particules (LAAP),
9 chemin de Bellevue, BP 110, Annecy le vieux, 74941 Annecy cedex, France.

LIGO-VIRGO-KAGRA COLLABORATION PUBLICATIONS

1. Performance of the KAGRA detector during the first joint observation with GEO 600 (O3GK), KAGRA Collaboration, H. Abe et al, arXiv: 2203.07011 (2022).
2. First joint observation by the underground gravitational-wave detector, KAGRA, with GEO600, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2203.01270 [gr-qc] (2022).
3. All-sky search for gravitational wave emission from scalar boson clouds around spinning black holes in LIGO O3 data, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2111.15507 [astro-ph.HE].
4. Constraints on the cosmic expansion history from GWTC-3, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2111.03604 [astro-ph.CO].
5. Search for subsolar-mass binaries in the first half of Advanced LIGO and Virgo's third observing run, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2109.12197 [astro-ph.CO].
6. Search for continuous gravitational waves from 20 accreting millisecond X-ray pulsars in O3 LIGO data, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2109.09255 [astro-ph.HE].

7. GWTC-2.1: Deep Extended Catalog of Compact Binary Coalescences Observed by LIGO and Virgo During the First Half of the Third Observing Run, LIGO Scientific and VIRGO Collaborations, R. Abbott et al, arXiv: 2108.01045 [gr-qc].
8. All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run, KAGRA and VIRGO and LIGO Scientific Collaborations, R. Abbott. et al, arXiv: 2107.13796 [gr-qc], Phys.Rev.D 104 (2021) 10, 102001.
9. All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run, LIGO Scientific and VIRGO and KAGRA Collaborations, R. Abbott et al, arXiv: 2107.03701 [gr-qc].
10. All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data, KAGRA and VIRGO and LIGO Scientific Collaborations, R. Abbott et al, arXiv: 2107.00600 [gr-qc], Phys.Rev.D 104 (2021) 8, 082004.
11. Observation of Gravitational Waves from Two Neutron Star–Black Hole Coalescences, LIGO Scientific and KAGRA and VIRGO Collaborations, R. Abbott et al, arXiv: 2106.15163 [astro-ph.HE], Astrophys. J. Lett. 915 (2021) 1, L5.
12. Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO–Virgo's Third Observing Run, LIGO Scientific and VIRGO Collaborations, R. Abbott (LIGO Lab., Caltech) et al, arXiv: 2105.06384 [gr-qc], Astrophys. J. 923 (2021) 1, 14.
13. Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgo's third observing run, KAGRA and Virgo and LIGO Scientific Collaborations, R. Abbott. et al, arXiv: 2101.12130 [gr-qc], Phys.Rev.D 104 (2021) 2, 022004.
14. Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift During the LIGO-Virgo Run O3a, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2010.14550 [astro-ph.HE], Astrophys. J. 915 (2021) 2, 86.
15. GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo During the First Half of the Third Observing Run, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2010.14527 [gr-qc], Phys.Rev.X 11 (2021), 021053.
16. Population Properties of Compact Objects from the Second LIGO-Virgo Gravitational-Wave Transient Catalog, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2010.14533 [astro-ph.HE], Astrophys. J. Lett. 913 (2021) 1, L7.
17. Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2010.14529 [gr-qc], Phys.Rev.D 103 (2021) 12, 122002.
18. Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer, KAGRA Collaboration, T. Akutsu. et al, arXiv: 2009.09305 [gr-qc], PTEP 2021 (2021) 5, 05A102.
19. Properties and Astrophysical Implications of the 150 M$_\odot$ Binary Black Hole Merger GW190521, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2009.01190 [astro-ph.HE], Astrophys. J. Lett. 900 (2020) 1, L13.

20. Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog, LIGO Scientific and Virgo Collaborations, R. Abbott. et al, arXiv: 2010.14529 [gr-qc], Phys.Rev.D 103 (2021) 12, 122002.
21. 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
22. 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]
23. 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].
24. 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].
25. Overview of KAGRA : KAGRA science, T. Akutsu et al. [KAGRA], arXiv:2008.02921 [gr-qc].
26. Gravitational-wave constraints on the equatorial ellipticity of millisecond pulsars, R. Abbott et al. [LIGO Scientific and Virgo], arXiv:2007.14251 [astro-ph.HE].
27. 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].
28. 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].
29. 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].
30. 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].
31. 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].
32. 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].
33. 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]

34. 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].
35. 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].
36. 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].
37. 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].
38. 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].
39. 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].
40. 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].
41. 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].
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