Statisitc

Number of first author articles	...	14
Refereed Articles	...	21
Preprints/journal sumissoions	...	5
Collaboration paper	...	1
Citations	...	468
h index (HEP-SPIRES)	...	12

First-author refereed/under-review publications

1. **H.-J. Kuan**, I. Markin, M. Ujevic, T. Dietrich, K. Kiuchi, M. Shibata, W. Tichy. The error budget of binary neutron star merger simulations for configurations with high spin. arXiv:2506.02115.
2. **H.-J. Kuan**, K. Kiuchi, M. Shibata. Tidal Resonance in Binary Neutron Star Inspiral: A High-Precision Study in Numerical Relativity. arXiv:2411.16850.
3. **H.-J. Kuan** and K. D. Kokkotas. Last three seconds: Packed message delivered by tides in binary neutron star mergers. Phys. Rev. D 108:063026, September 2023.
4. **H.-J. Kuan**, K. V. Van Aelst, A. T.-L. Lam and M. Shibata. Binary neutron star mergers in massive scalar-tensor theory: Quasiequilibrium states and dynamical enhancement of the scalarization. Phys. Rev. D 108:064057, September 2023.
5. **H.-J. Kuan**, A. G. Suvorov and K. D. Kokkotas. Measuring spin in coalescing binaries of neutron stars showing double precursors. Astron. Astrophys., 676(2):A59, June 2023.
6. **H.-J. Kuan**, A. T. L. Lam, D. D. Doneva, S. S. Yazadjiev, M. Shibata and K. Kiuchi. Dynamical scalarization during neutron star mergers in scalar-Gauss-Bonnet theory. Phys. Rev. D 108:063033, September 2023.
7. **H.-J. Kuan** and K. D. Kokkotas. f-mode imprints on gravitational waves from coalescing binaries involving aligned spinning neutron stars. Phys. Rev. D 106:064052, September 2022.
8. **H.-J. Kuan**, A. G. Suvorov, D. D. Doneva and S. S. Yazadjiev. Gravitational Waves from Accretion-Induced Descalarization in Massive Scalar-Tensor Theory. Phys. Rev. Lett. 129:121104, September 2022.
9. **H.-J. Kuan**, C. J. Krüger, A. G. Suvorov and K. D. Kokkotas. Constraining equation of state groups from g-mode asteroseismology. MNRAS, 513(3):4045-4056, April 2022.
10. **H.-J. Kuan**, J. Singh, D. D. Doneva, S. S. Yazadjiev, and K. D. Kokkotas. Nonlinear evolution and nonuniqueness of scalarized neutron stars. Phys. Rev. D, 104:124013, December 2021. 10.1103/PhysRevD.104.124013.
11. **H.-J. Kuan**, A. G. Suvorov and K. D. Kokkotas. General-relativistic treatment of tidal g-mode resonances in coalescing binaries of neutron stars. II. As triggers for precursor flares of short gamma-ray bursts. MNRAS, 508(2):1732-1744, December 2021.
12. **H.-J. Kuan**, D. D. Doneva, and S. S. Yazadjiev. Dynamical Formation of Scalarized Black Holes and Neutron Stars through Stellar Core Collapse. Phys. Rev. Lett., 127:161103, October 2021.
13. **H.-J. Kuan**, A. G. Suvorov, and K. D. Kokkotas. General-relativistic treatment of tidal g-mode resonances in coalescing binaries of neutron stars - I. Theoretical framework and crust breaking. MNRAS, 506(2):2985–2998, September 2021.

Second-author refereed/under-review publications

1. Y. Gao, **H.-J. Kuan**, C.-J. X, H.O. Silva, M. Shibata. PNonradial oscillations of stratified neutron stars with solid crusts: Mode characterization and tidal resonances in coalescing binaries. Phys. Rev. D
2. A. G. Suvorov, **H.-J. Kuan**, K. D. Kokkotas. Premerger phenomena in neutron-star binary coalescences. Universe 10 (2024) 441, November 2024.
3. A. T.-L. Lam, **H.-J. Kuan**, M. Shibata, K. Van Aelst, K. Kiuchi. Binary neutron star mergers in massive scalar-tensor theory: Properties of post-merger remnants. Phys.Rev.D 110:104018, November 2024.
4. A. G. Suvorov, **H.-J. Kuan**, A. Reboul-Salze and K. D. Kokkotas. Magnetic amplification in pre-merger neutron stars through resonance-induced magnetorotational instabilities. Phys.Rev.D 109:103023, May 2024.
5. A. G. Suvorov, **H.-J. Kuan** and K. D. Kokkotas. Quasi-periodic oscillations in precursor flares via seismic aftershocks from resonant shattering. Astron. Astrophys. 664:A177, August 2022.
6. C. Q. Geng, **H.-J. Kuan**, and L. W. Luo. Inverse-chirp imprint of gravitational wave signals in scalar tensor theory. Eur. Phys. J. C, 80:780, August 2020.
7. C. Q. Geng, **H.-J. Kuan**, and L. W. Luo. Viable Constraint on Scalar Field in Scalar-Tensor Theory. Class. Quant. Grav., 37:115001, May 2020.

Other co-authored refereed/under-review publications

1. A. Reboul-Salze, A. Astoul, **H.-J. Kuan**, A. G. Suvorov. Non-linear saturation of gravito-inertial modes excited by tidal resonances in binary neutron stars. arXiv:2503.24154.
2. Y. Gao, K. Hayashi, K. Kiuchi, A. T.-L. Lam, **H.-J. Kuan**, M. Shibata. Convective stability analysis of massive neutron stars formed in binary mergers. arXiv:2501.19053.
3. A. T.-L. Lam, K. V. Staykov, **H.-J. Kuan**, D. D. Doneva, S. S. Yazadjiev. Axisymmetric stability of neutron stars as extreme rotators in massive scalar-tensor theory. Phys. Rev. D 111:104030, May 2025.
4. A. T.-L. Lam, Y. Gao, **H.-J. Kuan**, M. Shibata, K. Van Aelst, K. Kiuchi. Accessing universal relations of binary neutron star waveforms in massive scalar-tensor theory. Phys. Rev. Lett. 134:151402, April 2025. [`Research highlight:` Page]
5. V. Brdar, T. Cheng, **H.-J. Kuan**, and Y.-Y. Li. Magnetar-powered neutrinos and magnetic moment signatures at IceCube. JCAP 07:026, July 2024.
6. D. Huang, C. Q. Geng, and **H.-J. Kuan**. Scalar gravitational wave signals from core collapse in massive scalar-tensor gravity with triple-scalar interactions. Class. Quant. Grav., 38:245006, November 2021.

Many Author publications

1. A. Abac, et. al.. The Science of the Einstein Telescope. ET-0036C-25.