

Selected Short-Author Publications

- **Rico K. L., Lo**, L. Sabani, and V. Cardoso, “Quasinormal modes and excitation factors of Kerr black holes”, (2025), [arXiv:2504.00084 \[gr-qc\]](#)
- J. M. Ezquiaga, **Rico K. L., Lo**, and L. Vujeva, “Diffraction around caustics in gravitational wave lensing”, (2025), [arXiv:2503.22648 \[gr-qc\]](#)
- J. Samsing, L. Zwick, P. Saini, K. Hendriks, **Rico K. L., Lo**, L. Vujeva, et al., “Constraining Proper Motion of Strongly Lensed Eccentric Binary Mergers using Doppler Triangulation”, (2025), [arXiv:2501.12494 \[astro-ph.HE\]](#)
- L. Vujeva, J. M. Ezquiaga, **Rico K. L., Lo**, and J. C. L. Chan, “Effects of Galaxy Cluster Structure on Lensed Transients”, (2025), [arXiv:2501.02096 \[astro-ph.CO\]](#)
- K. Taylor, D. Davis, and **Rico K. L., Lo**, “Phase consistency test to identify type II strongly lensed gravitational wave signals using a single event”, (2024), [arXiv:2412.15148 \[gr-qc\]](#)
- J. Janquart, D. Keitel, **Rico K. L., Lo**, J. C. L. Chan, J. M. Ezquiaga, O. A. Hannuksela, et al., “What is the nature of GW230529? An exploration of the gravitational lensing hypothesis”, *Monthly Notices of the Royal Astronomical Society*, [staf049 \(2025\)](#), [arXiv:2409.07298 \[gr-qc\]](#), <https://doi.org/10.1093/mnras/staf049>
- **Rico K. L., Lo**, L. Vujeva, J. M. Ezquiaga, and J. C. L. Chan, “Observational Signatures of Highly Magnified Gravitational Waves from Compact Binary Coalescence”, (accepted by *Phys. Rev. Lett*; in press) (2024), [arXiv:2407.17547 \[gr-qc\]](#)
- L. Vujeva, **Rico K. L., Lo**, J. M. Ezquiaga, and J. C. L. Chan, “lenscat: a Public and Community-Contributed Catalog of Known Strong Gravitational Lenses”, (accepted by *Philos. Trans. R. Soc. A*; in press) (2024), [arXiv:2406.04398 \[astro-ph.GA\]](#)
- J. M. Ezquiaga, W. Hu, and **Rico K. L., Lo**, “Identifying strongly lensed gravitational waves through their phase consistency”, *Phys. Rev. D* **108**, 103520 (2023), [arXiv:2308.06616 \[astro-ph.CO\]](#)
- **Rico K. L., Lo**, “Recipes for computing radiation from a Kerr black hole using a generalized Sasaki-Nakamura formalism: Homogeneous solutions”, *Phys. Rev. D* **110**, 124070 (2024), [arXiv:2306.16469 \[gr-qc\]](#)
- J. Janquart et al., “Follow-up analyses to the O3 LIGO–Virgo–KAGRA lensing searches”, *Mon. Not. Roy. Astron. Soc.* **526**, 3832–3860 (2023), [arXiv:2306.03827 \[gr-qc\]](#)
- **Rico K. L., Lo**, “denmarf: a Python package for density estimation using masked autoregressive flow”, (2023), [arXiv:2305.14379 \[astro-ph.IM\]](#)
- H. W. Y. Wong, L. W. L. Chan, I. C. F. Wong, **Rico K. L., Lo**, and T. G. F. Li, “Using overlap of sky localization probability maps for filtering potentially lensed pairs of gravitational-wave signals”, (2021), [arXiv:2112.05932 \[gr-qc\]](#)

- X. Li, L. Sun, **Rico K. L., Lo**, E. Payne, and Y. Chen, “Angular emission patterns of remnant black holes”, *Phys. Rev. D* **105**, 024016 (2022), [arXiv:2110.03116 \[gr-qc\]](#)
- J. Y. L. Kwok, **Rico K. L., Lo**, A. J. Weinstein, and T. G. F. Li, “Investigation of the effects of non-Gaussian noise transients and their mitigation in parameterized gravitational-wave tests of general relativity”, *Phys. Rev. D* **105**, 024066 (2022), [arXiv:2109.07642 \[gr-qc\]](#)
- S. Xin, B. Chen, **Rico K. L., Lo**, L. Sun, W.-B. Han, X. Zhong, et al., “Gravitational-wave echoes from spinning exotic compact objects: Numerical waveforms from the Teukolsky equation”, *Phys. Rev. D* **104**, 104005 (2021), [arXiv:2105.12313 \[gr-qc\]](#)
- I. C. F. Wong, P. T. H. Pang, **Rico K. L., Lo**, T. G. F. Li, and C. Van Den Broeck, “Null-stream-based Bayesian Unmodeled Framework to Probe Generic Gravitational-wave Polarizations”, (2021), [arXiv:2105.09485 \[gr-qc\]](#)
- **Rico K. L., Lo** and I. Magaña Hernandez, “Bayesian statistical framework for identifying strongly lensed gravitational-wave signals”, *Phys. Rev. D* **107**, 123015 (2023), [arXiv:2104.09339 \[gr-qc\]](#)
- Y. Wang, **Rico K. L., Lo**, A. K. Y. Li, and Y. Chen, “Identifying Type II Strongly Lensed Gravitational-Wave Images in Third-Generation Gravitational-Wave Detectors”, *Phys. Rev. D* **103**, 104055 (2021), [arXiv:2101.08264 \[gr-qc\]](#)
- P. T. H. Pang, **Rico K. L., Lo**, I. C. F. Wong, T. G. F. Li, and C. Van Den Broeck, “Generic searches for alternative gravitational wave polarizations with networks of interferometric detectors”, *Phys. Rev. D* **101**, 104055 (2020), [arXiv:2003.07375 \[gr-qc\]](#)
- A. K. Y. Li, **Rico K. L., Lo**, S. Sachdev, C. L. Chan, E. T. Lin, T. G. F. Li, et al., “Targeted subthreshold search for strongly lensed gravitational-wave events”, *Phys. Rev. D* **107**, 123014 (2023), [arXiv:1904.06020 \[gr-qc\]](#)
- **Rico K. L., Lo**, T. G. F. Li, and A. J. Weinstein, “Template-based Gravitational-Wave Echoes Search Using Bayesian Model Selection”, *Phys. Rev. D* **99**, 084052 (2019), [arXiv:1811.07431 \[gr-qc\]](#)

Selected LIGO-Virgo-KAGRA Collaboration Publications with Significant Contributions

- R. Abbott et al., “Search for Gravitational-lensing Signatures in the Full Third Observing Run of the LIGO–Virgo Network”, *Astrophys. J.* **970**, 191 (2024), [arXiv:2304.08393 \[gr-qc\]](#)
- R. Abbott et al., “Tests of General Relativity with GWTC-3”, (accepted by *Phys. Rev. D*; in press) (2021), [arXiv:2112.06861 \[gr-qc\]](#)

- R. Abbott et al., “Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO–Virgo’s Third Observing Run”, *Astrophys. J.* **923**, 14 (2021), [arXiv:2105.06384 \[gr-qc\]](#)
- R. Abbott et al., “Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog”, *Phys. Rev. D* **103**, 122002 (2021), [arXiv:2010.14529 \[gr-qc\]](#) (for this paper I also served as a member of the internal editorial team for the LVK collaboration)
- B. P. Abbott et al., “GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs”, *Phys. Rev. X* **9**, 031040 (2019), [arXiv:1811.12907 \[astro-ph.HE\]](#)

Contributed Review Articles and Book Chapters

- G. P. Smith et al., “Multi-messenger Gravitational Lensing”, (2025), [arXiv:2503.19973 \[astro-ph.HE\]](#)