

LIST OF PUBLICATIONS

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Under review or in preparation

1. **V. Strokov**, G. Fragione, and E. Berti. “Inferring a population of intermediate-mass black holes with LISA”. In preparation.

Refereed

1. R. Ebadi, **V. Strokov**, E. H. Tanin, E. Berti, and R. L. Walsworth. “LISA double white dwarf binaries as Galactic accelerometers”. In: *arXiv e-prints* (May 2024). arXiv: 2405.13109 [gr-qc].
2. L. Reali, R. Cotesta, A. Antonelli, K. Kritos, **V. Strokov**, and E. Berti. “Intermediate-mass black hole binary parameter estimation with next-generation ground-based detector networks”. In: *Phys. Rev. D* 110.10 (2024), p. 103002. DOI: 10.1103/PhysRevD.110.103002. arXiv: 2406.01687 [gr-qc].
3. **V. Strokov** and E. Berti. “Quasimonochromatic LISA sources in the frequency domain”. In: *Phys. Rev. D* 109.10 (2024), p. 104013. DOI: 10.1103/PhysRevD.109.104013. arXiv: 2312.00121 [gr-qc].
4. **V. Strokov**, G. Fragione, and E. Berti. “LISA constraints on an intermediate-mass black hole in the Galactic Centre”. In: *Mon. Not. Roy. Astron. Soc.* 524.2 (2023), pp. 2033–2041. DOI: 10.1093/mnras/stad2002. arXiv: 2303.00015 [astro-ph.HE].
5. K. Kritos, **V. Strokov**, V. Baibhav, and E. Berti. “Dynamical formation of black hole binaries in dense star clusters: the Rapster code”. In: *arXiv e-prints* (Oct. 2022). accepted to Phys. Rev. D. arXiv: 2210.10055 [astro-ph.HE].
6. **V. Strokov**, G. Fragione, K. W. K. Wong, T. Helfer, and E. Berti. “Hunting for intermediate-mass black holes with LISA binary radial velocity measurements”. In: *Phys. Rev. D* 105.12 (2022), p. 124048. DOI: 10.1103/PhysRevD.105.124048. arXiv: 2109.08154 [astro-ph.HE].
7. A. A. Popov, **V. N. Strokov**, and A. A. Surdyaev. “A proof-of-concept neural network for inferring parameters of a black hole from partial interferometric images of its shadow”. In: *Astronomy and Computing* 36, 100467 (2021), p. 100467. DOI: 10.1016/j.ascom.2021.100467. arXiv: 2311.16227 [astro-ph.HE].
8. **V. N. Strokov** and Sh. Khlghatyan. “The orbital Lense–Thirring precession in a strong field”. In: *General Relativity and Gravitation* 51.7 (2019). DOI: 10.1007/s10714-019-2563-9. arXiv: 1906.05309 [gr-qc].
9. **V. N. Strokov**, V. N. Lukash, and E. V. Mikheeva. “Black-and-white hole as a space-time with integrable singularity”. In: *International Journal of Modern Physics A* 31 (2016), p. 1641018. DOI: 10.1142/S0217751X16410189.
10. T. R. P. Caramês, M. H. Daouda, J. C. Fabris, A. M. Oliveira, O. F. Piattella, and **V. Strokov**. “The Brans-Dicke-Rastall theory”. In: *European Physical Journal C* 74 (2014), p. 3145. DOI: 10.1140/epjc/s10052-014-3145-3. arXiv: 1409.2322 [gr-qc].
11. V. N. Lukash, E. V. Mikheeva, and **V. N. Strokov**. “The early universe and cosmogenesis”. In: *Physics of Particles and Nuclei* 44 (2013), pp. 415–421. DOI: 10.1134/S1063779613030064.
12. V. N. Lukash and **V. N. Strokov**. “Space-Times with Integrable Singularity: Black-White Holes and Astrogenic Universes”. In: *International Journal of Modern Physics A* 28 (2013), p. 1350007. DOI: 10.1142/S0217751X13500073. arXiv: 1301.5544 [gr-qc].

13. S. V. Repin, V. N. Lukash, and **V. N. Strokov**. “Analytical approximation for the Fe K_α emission line in quasar spectra”. In: *Astronomy Reports* 52 (2008), pp. 1–11. DOI: 10.1134/S1063772908010010. arXiv: 0705.2574 [astro-ph].
14. **V. Strokov**. “On convergence to equilibrium in strongly coupled Bogoliubov’s oscillator model”. In: *Infinite Dimensional Analysis, Quantum Probability, and Related Topics* 10.4 (2007), pp. 573–589. DOI: 10.1142/S0219025707002865. arXiv: quant-ph/0612202.
15. **V. N. Strokov**. “Cosmological status of Lagrangian theory of density perturbations”. In: *Astronomy Reports* 51 (2007), pp. 431–434. DOI: 10.1134/S1063772907060017. arXiv: astro-ph/0612397.

Non-Refereed

1. **V. N. Strokov**, A. A. Popov, and Sh. G. Khlghatyan. “Numeric integration of geodesic equations in Schwarzschild’s field in different coordinate frames”. In: *Proceedings of the 59th MIPT science conference. General and applied physics*. Ed. by V.V. Kiselev. In Russian. Moscow Institute of Physics and Technology. Moscow: MIPT, 2016, pp. 75–77.
2. V. N. Lukash, E. V. Mikheeva, and **V. N. Strokov**. “From the Cosmological Model to the generation of the Hubble flow”. In: *Physics Uspekhi* 55 (2012), pp. 204–209. DOI: 10.3367/UFNe.0182.201202k.0216. arXiv: 1110.6820 [astro-ph.CO].
3. V. N. Lukash, E. V. Mikheeva, and **V. N. Strokov**. “Generation of cosmological flows in general relativity”. In: *Physics Uspekhi* 55.27 (2012), pp. 831–837. DOI: 10.3367/UFNe.0182.201208k.0894. arXiv: 1211.6619 [gr-qc].
4. **V. Strokov**. “ADM Formulation of Cosmological Perturbation Theory”. In: *Twelfth Marcel Grossmann Meeting on General Relativity*. 2012, p. 1382.
5. V. N. Lukash and **V. N. Strokov**. “Geometries with integrable singularity – black/white holes and astrogenic universes”. In: *ArXiv e-prints* (2011). arXiv: 1109.2796 [astro-ph.CO].
6. V. N. Lukash and **V. N. Strokov**. *The sources of geometries with an integrable singularity: black/white holes and astrogenic universes*. Tech. rep. 3. In Russian. Lebedev Physical Institute, 2011.
7. **V. N. Strokov**. *A quantum model of the quasi-Friedmannian universe*. Tech. rep. 7. In Russian. Lebedev Physical Institute, 2011.
8. **V. Strokov**. “Equivalence of two approaches in theory of cosmological density perturbations”. In: *Nuovo Cimento B* 122 (2007), pp. 1399–1404.