

Books:

G.V. Vereshchagin and A.G. Aksenov, “Relativistic Kinetic Theory With Applications in Astrophysics and Cosmology”, Nauka, Moscow, 2018, 470 pages. ISBN 978-5-02-040144-0.

G.V. Vereshchagin and A.G. Aksenov, “Relativistic Kinetic Theory With Applications in Astrophysics and Cosmology”, Cambridge University Press, 2017, 334 pages. ISBN: 9781107048225.

G.V. Vereshchagin, "Relativistic Kinetic Theory with some Applications", in: *Cosmology and Gravitation: XVth Brazilian School of Cosmology and Gravitation*, eds. Mario Novello and Santiago E. Perez Bergliaffa, Cambridge Scientific Publishers, ISBN 978-1-908106-39-1 2014, pp 1-40.

G.V. Vereshchagin, “Gauge Theories of Gravity with the Scalar Field in Cosmology”, in “Frontiers in Field Theory”, edited by O. Kovras, Nova Science Publishers, New York, ISBN: 1-59454-127-2, 2005, pp. 213-255.

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1. M. A. Prakapenia and G. V. Vereshchagin, “Pauli blocking effects in thermalization of relativistic plasma”, *Phys. Lett. A*, Vol. 384 (2020) 126679.
2. G. V. Vereshchagin and I. A. Siutsou, “Diffusive photospheres in gamma-ray bursts”, *MNRAS* 494 (2020), pp. 1463-1469.
3. M. A. Prakapenia and G. V. Vereshchagin, “Bose-Einstein condensation in relativistic plasma”, *EPL* 128 (2019) 50002.
4. Suzana Bedic and G. V. Vereshchagin, “Probability of inflation in Loop Quantum Cosmology”, *Phys. Rev. D* 99 (2019) 043512.
5. R. Ruffini, J.D. Melon Fuksman and G.V. Vereshchagin, “On the role of a cavity in the hypernova ejecta of GRB 190114C”, *ApJ* 883 (2019) 191.
6. M. A. Prakapenia, I. A. Siutsou and G. V. Vereshchagin, “Thermalization of electron-positron plasma with quantum degeneracy”, *Physics Letters A* 383 (2019) pp. 306-310.
7. M. A. Prakapenia, I. A. Siutsou, and G. V. Vereshchagin, “Numerical Scheme for Treatment of Uehling-Uhlenbeck Equation for Binary and Triple Interactions in Relativistic Plasma”, *Astronomy Reports*, Volume 62, Issue 12 (2018), pp. 926-93.
8. G. V. Vereshchagin and S. Bedić, “Loop Quantum Cosmology and Probability of Inflation”, *Astronomy Reports*, Volume 62, Issue 12 (2018), pp. 959-964.
9. M. A. Prakapenia, I. A. Siutsou, and G. V. Vereshchagin, “Numerical scheme for treatment of Uehling–Uhlenbeck equation for two-particle interactions in relativistic plasma”, *Journal of Computational Physics*, Volume 373 (2018), pp. 533–544.
10. V. A. Belinski and G. V. Vereshchagin, “On the cosmological gravitational waves and cosmological distances”, *Physics Letters B*, Volume 778 (2018), pp. 332-338.
11. G. V. Vereshchagin, “Cosmic horizon for GeV sources and photon-photon scattering”, *Astrophysics and Space Science*, Vol. 363:29 (2018).
12. R. Ruffini, G.V. Vereshchagin and Y. Wang, “Thermal emission in the early afterglow of gamma-ray bursts from their interaction with supernova ejecta”, *A&A*, Vol. 600 (2017) id.A131, 7 pp.
13. R. Ruffini, G.V. Vereshchagin and S.-S. Xue, “Cosmic absorption of ultra high energy particles”, *Astrophysics and Space Science*, Vol. 361:82 (2016).

14. A. G. Aksenov, R. Ruffini, and G. V. Vereshchagin, “Radiative transfer in relativistic plasma outflows and comptonization of photons near the photosphere”, *Astronomy Reports*, Vol. 59, No. 6, (2015) pp. 418–424.
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17. G.V. Vereshchagin, “Physics of non-dissipative ultrarelativistic photospheres”, *International Journal of Modern Physics D* Vol. 23, No. 1 (2014) 1430003.
18. I.A. Siutsou, R. Ruffini and G.V. Vereshchagin, “Spreading of ultrarelativistically expanding shell: an application to GRBs”, *New Astronomy*, Vol. 27 (2014), pp. 30-33.
19. A.G. Aksenov, R. Ruffini and G.V. Vereshchagin, “Comptonization of photons near the photosphere of relativistic outflows”, *MNRAS Letters*, Vol. 436, Issue 1 (2013) pp. L54-L58.
20. R. Ruffini, I.A. Siutsou and G.V. Vereshchagin, “Theory of photospheric emission from relativistic outflows”, *The Astrophysical Journal*, Vol. 772, Issue 1 (2013) article id. 11.
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22. A. Benedetti, R. Ruffini and G.V. Vereshchagin, “Phase space evolution of pairs created in strong electric fields”, *Physics Letters A*, Vol. 377 (2013) 206–215.
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26. A.G. Aksenov, R. Ruffini and G.V. Vereshchagin, “Thermalization of the mildly relativistic plasma”, *Physical Review D*, Vol. 79 (2009) 043008.
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30. G.V. Vereshchagin, “Inflation and cycles in Loop Quantum Cosmology”, *Il Nuovo Cimento B*, Vol. 122 (2007) No 2, pp. 163-166.
31. H.G. Khachatryan, G.V. Vereshchagin and G. Yegorian, “Luminosity distance in GX cosmological models”, *Il Nuovo Cimento B*, Vol. 122 (2007) No 2, pp. 197-200.
32. A.G. Aksenov, R. Ruffini and G.V. Vereshchagin, “Thermalization of nonequilibrium electron-positron-photon plasmas”, *Physical Review Letters*, Vol. 99 (2007) No 12, 125003.
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39. G.V. Vereshchagin, “A qualitative approach to semi-classical loop quantum cosmology”, *Journal of Cosmology and Astroparticle Physics* 07 (2004) 013.
40. G.V. Vereshchagin, “On stability of simplest non-singular inflationary cosmological models within general relativity and gauge theories of gravity”, *International Journal of Modern Physics D* Vol.13 (2004), No.4, pp.695-707.
41. G.V. Vereshchagin, “Flat cosmological models with massive scalar field in gauge theories of gravity”, *International Journal of Modern Physics D* Vol.12 (2003), No.8, pp. 1487-1497.
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45. I.A. Siutsou, A. G. Aksenov and G. V. Vereshchagin, “On thermalization of electron-positron-photon plasma”, in the Proceedings of “The Second ICRANet César Lattes Meeting: Supernovae, Neutron Stars and Black Holes” meeting, *AIP Conference Proceedings* 1693 (2015) 070007.
46. R. Ruffini and G.V. Vereshchagin, “Electron-positron plasma in GRBs and in cosmology”, *Il Nuovo Cimento C*, Vol. 36, Issue 1, (2013) pp.255-266.
47. A. Benedetti, R. Ruffini and G.V. Vereshchagin, “On the kinetic treatment of pair production in strong electric fields”, *Il Nuovo Cimento C*, Vol. 36, Issue 1, (2013) pp.15-19.
48. A. G. Aksenov, R. Ruffini, I.A. Siutsou and G. V. Vereshchagin, “Dynamics and Emission of Mildly Relativistic Plasma”, *International Journal of Modern Physics: Conference Series*, Vol. 12, Issue 01, (2012) pp. 1-9.
49. A. G. Aksenov, R. Ruffini, and G. V. Vereshchagin, “Kinetics of the Mildly Relativistic Plasma and GRBs” in the Proceedings of “The Sun, the stars, the Universe and General Relativity” meeting in honor of 95th Anniversary of Ya. B. Zeldovich in Minsk, *AIP Conference Proceedings* 1205 (2010) 11-16.
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63. Григорий Верещагин, "Современное состояние астрофизики и ее перспективы в Беларуси", Наука и инновации, 8 (186) август 2018, стр. 22-29.
64. Иван Сивцов, Григорий Верещагин, "Гамма-всплески — самые яркие и загадочные объекты во Вселенной", 8 (186) август 2018, стр. 39-44.
65. Иван Сивцов, Григорий Верещагин, "Гамма-всплески – голос Вселенной ", Наука, 22 (2017), стр. 8.