LIST OF PUBLICATIONS

Oleksandr Kutovyi (Kutoviy)

PAPERS:

1. The essential spectrum of a class of matrix differential operators of mixed order (with O. Konstantinov) [Ukrainian] *Visn. Kyiv. Univ. Ser. Fiz.-Mat. Nauki*, no. 2, 144-147, 2001.
2. Existence of Gibbs state for continuous gas with many-body interaction (with A. Rebenko), *J. Math. Phys.* 45, no. 4, 1593-1605, 2004.
3. On relations between a priori bounds for measures on configuration spaces (with Yu. Kondratiev, T. Kuna), *Infinite Dimensional Analysis, Quantum Probabilities and Related Topics*, Vol. 7, No. 2, 195-213, 2004.
4. Existence of Gibbs states for a non-ideal gas in $\mathbb{R}^d$: the case of a pair, long-range interaction (with Yu. Kondratiev and E. Pechersky), *Methods of Functional Analysis and Topology*, Vol. 10, No. 3, 33-43, 2004.
5. Existence and some properties of Gibbs measures in the continuum (with Yu. Kondratiev), *Markov processes and related fields*, Vol. 11 No. 1, 111-132, 2005.
6. On the metrical properties of the configuration space (with Yu. Kondratiev), *Mathematische Nachrichten*, Vol. 279, No. 7, 774-783, 2006.
7. Nonequilibrium Glauber-type dynamics in continuum (with Yu. Kondratiev and E. Zhizhina), *Journal of Mathematical Physics*, Vol. 47, 2006.
8. A note on projections of Gibbs measures from a class arising in economic modeling (with M. Höhnisch), arXiv:physics/0610250, 2006.
9. On non-equilibrium stochastic dynamics for interacting particle systems in continuum (with Yu. Kondratiev and R. Minlos), *J. Funct. Anal.*, 255, no. 1, 200-227, 2008.
10. Correlation functions and invariant measures in continuous contact model (with Yu. Kondratiev and S. Pirogov), *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, 11, no. 2, 231-258, 2008.
11. Diffusion approximation for equilibrium Kawasaki dynamics in continuum (with Yu. Kondratiev, E. Lytvynov), *Stochastic Process. Appl.* 118, no. 7, 1278-1299, 2008.
12. Individual based model with competition in spatial ecology (with D. Finkelshtein and Yu. Kondratiev), *SIAM J. Math. Anal.* 41, no. 1, 297-317, 2009.
13. Ergodicity of non-equilibrium Glauber dynamics in continuum (with Yu. Kondratiev and R. Minlos), *J. Funct. Anal.* 258, no. 9, 3097-3116, 2010.
14. Occupation measure functionals in merging phase space. (with V. S. Koroliuk and N. Limnios), *Stochastics*, 82, no. 1-3, 149-163, 2010.
15. Vlasov scaling for stochastic dynamics of continuous systems (with D. Finkelshtein and Yu. Kondratiev), *J. Stat. Phys.*, 141: 158-178, 2010.
16. Binary jumps in continuum. I. Equilibrium processes and their scaling limits (with D. Finkelshtein, Yu. Kondratiev and E. Lytvynov), *J. Math. Phys.*, 52, 063304, 2011.

17. Binary jumps in continuum. II. Non-equilibrium dynamics and their scaling limits (with D. Finkelshtein, Yu. Kondratiev and E. Lytvynov), *J. Math. Phys.*, 52, 113301, 2011.
18. Vlasov scaling for the Glauber dynamics in continuum (with D. Finkelshtein and Yu. Kondratiev), *Infinite Dimensional Analysis, Quantum Probabilities and Related Topics* , 14(4), 537-569, 2011.
19. An approximating approach to construction of the Glauber dynamics in continuum (with D. Finkelshtein, Yu. Kondratiev and E. Zhizhina), *Math. Nachr.*, 285(2-3), 223-235, 2012.
20. Semigroup approach to non-equilibrium birth-and-death stochastic dynamics in continuum (with D. Finkelshtein and Yu. Kondratiev), *J. Funct. Anal.*, 262(3), p. 1274-1308, 2012
21. Correlation functions evolution for the Glauber dynamics in continuum (with D. Finkelshtein and Yu. Kondratiev), *Semigroup Forum* 85, no. 2, p. 289-306, 2012.
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23. Stochastic evolution of a continuum particle system with dispersal and competition: Micro- and mesoscopic description (with D. Finkelshtein, Yu. Kondratiev, and Yu. Kozitsky), *The European Physical Journal Special Topics* 216, no. 1, p. 107-116, 2013.
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25. Operator approach to Vlasov scaling for some models of spatial ecology (with D. Finkelshtein and Yu. Kondratiev), *Methods of Functional Analysis and Topology*, vol. 19, no. 2, pp. 108-126, 2013.
26. On non autonomous Markov evolutions in continuum (with M. Friesen), *Interdisciplinary Studies of Complex Systems*, No. 2, p. 5-59, 2013.
27. Establishment and Fecundity in Spatial Ecological Models: Statistical Approach and Kinetic Equations (with D. Finkelshtein and Yu. Kondratiev), *Infinite Dimensional Analysis, Quantum Probability and Related Topics*, Vol. 16, No. 2, 1350014 (24 pages) DOI: 10.1142/S0219025713500148, 2013.
28. Kawasaki dynamics of interacting particles in continuum: micro- and mesoscopic description (with C. Berns, Yu. Kondratiev and Yu. Kozitsky), *Journal of Dyn. Diff. Eq.*, (2013) 25:1027-1056 doi: 10.1007/s10884-013-9328-z
29. On spatial mutation-selection models (with Yu. Kondratiev, R. Minlos and S. Pirogov), *J. Math. Phys.* 54, 113504 (2013); doi: 10.1063/1.4828856.
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31. On an aggregation in birth-and-death stochastic dynamics (with D. Finkelshtein, Yu. Kondratiev, E. Zhizhina), *Nonlinearity*, 2014, 27(6), 1105-1133.
32. Density behavior of spatial birth-and-death stochastic evolutions of mutating genotypes under selection rates (with D. Finkelshtein, Yu. Kondratiev, S.

Molchanov, and E. Zhizhina), *Russian Journal of Mathematical Physics*, 21, no. 4, 450-459, 2014.
33. Statistical dynamics of continuous systems: perturbative and approximative approaches (with D. Finkelshtein and Yu. Kondratiev). *Arab. J. of Math.* (Springer) 4, no. 4, 255–300, 2015.
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35. Dynamical Widom-Rowlinson model and its mesoscopic limit (with D. Finkelshtein, Yu. Kondratiev, and M. J. Oliveira), *Journal of Statistical Physics*, 158, no. 1, 57-86, 2015.
36. Markov Jump Dynamics with Additive Intensities in Continuum: State Evolution and Vlasov Scaling (with C. Berns and Yu. Kondratiev), *J. Stat. Phys.*, 161, no. 4, 876–901, 2015.
37. Stochastic models of tumour development and related mesoscopic equations (with D. Finkelshtein, M. Friesen, H. Hatzikirou, Yu. Kondratiev, T. Krüger), *Interdisciplinary Studies of Complex Systems*, No. 7, 5–85, 2015.
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40. Lattice birth-and-death processes (with V. Bezborodov and Yu. Kondratiev), *Moscow Mathematical Journal*, 19, no. 1, 7-36, 2019.
41. Markov evolutions in spatial ecology: From microscopic dynamics to kinetics (with Y. Kondratiev and P. Tkachov), *EMS Series of Congress Reports: Spectral Structures and Topological Methods in Mathematics*, European Mathematical Society: 75-105, 2019.
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44. Evaluating parameters of econometric models with linear limitations and a rank deficient observation matrix (with G. Gryshchenko and O. Shutovskyi), *Underwater technologies: industrial and civil engineering*, 10, 3-12, 2020, DOI: 10.32347/uwt2020.10.1101
45. On Stochastic Cucker-Smale flocking dynamics (with M. Friesen), *Kinetic and Related Models*, 13, no. 2, 211-247, 2020.
46. Nonlinear perturbations of evolution systems in scales of Banach spaces (with M. Friesen), *Nonlinearity*, 33, no. 11, 6134-6156, 2020.
47. Fecundity regulation in a spatial birth-and-death process (with V. Bezborodov, L. Di Persio, D. Finkelshtein, Yu. Kondratiev), *Stochastic and Dynamics*, 21, no.1, 2050038, 27 pp, 2021.

48. Invariant measures for spatial contact model in small dimensions (with Yu. Kondratiev, S.A. Pirogov, E. Zhizhina), *Markov processes and related fields*, v.27, Issue 3, 413-438, 2021

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