

Списък на публикациите на проф. Людмил Кацарков
за участие в конкурс за член-кореспондент на БАН
в областта на математическите науки,
обявен на страницата на БАН на 07.05.2024 г.

1. Borisov, Dennis; **Katzarkov, Ludmil**; Sheshmani, Artan; Yau, Shing-Tung, *Strictification and gluing of Lagrangian distributions on derived schemes with shifted symplectic forms*, Adv. Math. 438 (2024), Paper No. 109477, 54 pp., **IF: 1.7 (Q1)**
2. **Katzarkov, L.**; Lee, K. S.; Svoboda, J.; Petkov, A., *Interpretations of spectra*, Springer Proc. Math. Stat., 409, Springer, Cham, 2023, 371–407. ISBN: 978-3-031-17858-0; 978-3-031-17859-7
3. Haiden, F.; **Katzarkov, L.**; Kontsevich, M.; Pandit, P., *Semistability, modular lattices, and iterated logarithms*, J. Differential Geom. 123 (2023), no. 1, 21–66. **IF: 2.5 (Q1)**
4. Dimitrov, George; **Katzarkov, Ludmil**, *Noncommutative counting invariants and curve complexes*, Int. Math. Res. Not. IMRN (2022), no. 17, 13317–13395. **IF: 1.0 (Q2)**
5. Borisov, Dennis; **Katzarkov, Ludmil**; Sheshmani, Artan, *Shifted symplectic structures on derived Quot-stacks I—Differential graded manifolds*, Adv. Math. 403 (2022), Paper No. 108369, 31 pp. **IF: 1.7 (Q1)**
6. **Katzarkov, Ludmil**; Pandit, Pranav; Spaide, Theodore, *Calabi-Yau structures, spherical functors, and shifted symplectic structures*, Adv. Math. 392 (2021), Paper No. 108037, 71 pp. **IF: 1.530 (Q1)**
7. **Katzarkov, Ludmil**; Lupercio, Ernesto; Meersseman, Laurent; Verjovsky, Alberto, *Quantum (non-commutative) toric geometry: foundations*, Adv. Math. 391 (2021), Paper No. 107945, 110 pp. **IF: 1.530 (Q1)**
Cited 4 times

8. Fan, Yu-Wei; Filip, Simion; Haiden, Fabian; **Katzarkov, Ludmil**; Liu, Yijia, *On pseudo-Anosov autoequivalences*, Adv. Math. 384 (2021), Paper No. 107732, 37 pp. **IF: 1.530 (Q1)**
Cited 7 times

9. **Katzarkov, L.**; Przyjalkowski, V. V.; Harder, A., *P=W Phenomena*, Mat. Zametki 108 (2020), no. 1, 33–46. Math. Notes 108 (2020), no. 1-2, 39–49. **IF: 0.673 (Q4)**
Cited 1 times

10. Dimitrov, George; **Katzarkov, Ludmil**, *Some new categorical invariants*, Selecta Math. (N.S.) 25 (2019), no. 3, Paper No. 45, 60 pp. **IF: 1.053 (Q2)**
Cited 1 times

11. Harder, Andrew; **Katzarkov, Ludmil**, *Perverse sheaves of categories and some applications*, Adv. Math. 352 (2019), 1155–1205. **IF: 1.494 (Q1)**
Cited 2 times

12. Itenberg, Ilia; **Katzarkov, Ludmil**; Mikhalkin, Grigory; Zharkov, Ilia, *Tropical homology*, Math. Ann. 374 (2019), no. 1-2, 963–1006. **IF: 1.136 (Q2)**
Cited 23 times

13. Dimitrov, George; **Katzarkov, Ludmil**, *Bridgeland stability conditions on wild Kronecker quivers*, Adv. Math. 352 (2019), 27–55. **IF: 1.494 (Q1)**
Cited 5 times

14. Ballard, Matthew; Favero, David; **Katzarkov, Ludmil**, *Variation of geometric invariant theory quotients and derived categories*, J. Reine Angew. Math. 746 (2019), 235–303. **IF: 1.486 (Q1)**
Cited 40 times

15. Blanc, Anthony; **Katzarkov, Ludmil**; Pandit, Pranav, *Generators in formal deformations of categories*, Compos. Math. 154 (2018), no. 10, 2055–2089. **IF: 1.301 (Q1)**
Cited 3 times

16. **Katzarkov, Ludmil**; Pandit, Pranav; Simpson, Carlos, *Reduction for $SL(3)$ pre-buildings*, Proc. Sympos. Pure Math., 98, American Mathematical Society, Providence, RI, 2018, 207–227. ISBN: 978-1-4704-3515-8

17. Ballard, Matthew; Deliu, Dragos; Favero, David; Isik, M. Umut; **Katzarkov, Ludmil**, *On the derived categories of degree d hypersurface fibrations*, Math. Ann. 371 (2018), no. 1-2, 337–370. **IF: 1.356 (Q1)**
Cited 9 times
18. Haiden, F.; **Katzarkov, L.**; Kontsevich, M., *Flat surfaces and stability structures*, Publ. Math. Inst. Hautes Études Sci. 126 (2017), 247–318. **IF: 1.957 (Q1)**
Cited 67 times
19. **Katzarkov, Ludmil**; Noll, Alexander; Pandit, Pranav; Simpson, Carlos, *Constructing buildings and harmonic maps*, Progr. Math., 324, Birkhäuser/Springer, Cham, 2017, 203–260. ISBN: 978-3-319-59938-0; 978-3-319-59939-7
Cited 4 times
20. Ballard, Matthew; Deliu, Dragos; Favero, David; Isik, M. Umut; **Katzarkov, Ludmil**, *Homological projective duality via variation of geometric invariant theory quotients*, J. Eur. Math. Soc. (JEMS) 19 (2017), no. 4, 1127–1158. **IF: 1.969 (Q1)**
Cited 8 times
21. Gross, Mark; **Katzarkov, Ludmil**; Ruddat, Helge, *Towards mirror symmetry for varieties of general type*, Adv. Math. 308 (2017), 208–275. **IF: 1.372 (Q1)**
Cited 16 times
22. **Katzarkov, Ludmil**; Kontsevich, Maxim; Pantev, Tony, *Bogomolov-Tian-Todorov theorems for Landau-Ginzburg models*, J. Differential Geom. 105 (2017), no. 1, 55–117. **IF: 1.562 (Q1)**
Cited 40 times
23. Dimitrov, George; **Katzarkov, Ludmil**, *Non-semistable exceptional objects in hereditary categories*, Int. Math. Res. Not. IMRN (2016), no. 20, 6293–6377. **IF: 0.924 (Q1)**
Cited 1 times
24. Diemer, Colin; **Katzarkov, Ludmil**; Kerr, Gabriel, *Symplectomorphism group relations and degenerations of Landau-Ginzburg models*, J. Eur. Math. Soc. (JEMS) 18 (2016), no. 10, 2167–2271. **IF: 2.096 (Q1)**
Cited 7 times

25. Abouzaid, Mohammed; Auroux, Denis; **Katzarkov, Ludmil**, *Lagrangian fibrations on blowups of toric varieties and mirror symmetry for hypersurfaces*, Publ. Math. Inst. Hautes Études Sci. 123 (2016), 199–282. **IF: 3.182 (Q1)**
Cited 40 times
26. Ballard, Matthew; Deliu, Dragos; Favero, David; Isik, M. Umut; **Katzarkov, Ludmil**, *Resolutions in factorization categories*, Adv. Math. 295 (2016), 195–249. **IF: 1.373 (Q1)**
Cited 14 times
27. Dimitrov, George; **Katzarkov, Ludmil**, *Bridgeland stability conditions on the acyclic triangular quiver*, Adv. Math. 288 (2016), 825–886. **IF: 1.373 (Q1)**
Cited 7 times
28. Ballard, Matthew; Diemer, Colin; Favero, David; **Katzarkov, Ludmil**; Kerr, Gabriel, *The Mori program and non-Fano toric homological mirror symmetry*, Trans. Amer. Math. Soc. 367 (2015), no. 12, 8933–8974. **IF: 1.196 (Q1)**
Cited 4 times
29. Dimitrov, George; **Katzarkov, Ludmil**, *Non-semistable exceptional objects in hereditary categories: some remarks and conjectures*, Contemp. Math., 643, American Mathematical Society, Providence, RI, 2015, 263–287. ISBN: 978-1-4704-1557-0.
30. Böhning, Christian; Graf von Bothmer, Hans-Christian; **Katzarkov, Ludmil**; Sosna, Pawel, *Determinantal Barlow surfaces and phantom categories*, J. Eur. Math. Soc. (JEMS) 17 (2015), no. 7, 1569–1592. **IF: 1.950 (Q1)**
Cited 20 times
31. Galkin, Sergey; **Katzarkov, Ludmil**; Mellit, Anton; Shinder, Evgeny, *Derived categories of Keum's fake projective planes*, Adv. Math. 278 (2015), 238–253. **IF: 1.405 (Q1)**
Cited 15 times
32. **Katzarkov, Ludmil**; Noll, Alexander; Pandit, Pranav; Simpson, Carlos, *Harmonic maps to buildings and singular perturbation theory*, Comm. Math. Phys. 336 (2015), no. 2, 853–903. **IF: 2.375 (Q1)**

Cited 16 times

33. Favero, David; Haiden, Fabian; **Katzarkov, Ludmil**, *An orbit construction of phantoms, Orlov spectra, and Knörrer periodicity*, Lect. Notes Unione Mat. Ital., 15, Springer, Cham, 2014, 33–42. ISBN: 978-3-319-06513-7; 978-3-319-06514-4
34. Dimitrov, G.; Haiden, F.; **Katzarkov, L.**; Kontsevich, M., *Dynamical systems and categories*, Contemp. Math., 621, American Mathematical Society, Providence, RI, 2014, 133–170. ISBN: 978-0-8218-9494-1.
35. Ballard, Matthew; Favero, David; **Katzarkov, Ludmil**, *A category of kernels for equivariant factorizations and its implications for Hodge theory*, Publ. Math. Inst. Hautes Études Sci. 120 (2014), 1–111. **IF: 2.882 (Q1)**
Cited 27 times
36. Favero, David; Iliev, Atanas; **Katzarkov, Ludmil**, *On the Griffiths groups of Fano manifolds of Calabi-Yau Hodge type*, Pure Appl. Math. Q. 10 (2014), no. 1, 1–55. **IF: 0.175 (Q4)**
Cited 4 times
37. Ballard, Matthew; Favero, David; **Katzarkov, Ludmil**, *A category of kernels for equivariant factorizations, II: further implications*, J. Math. Pures Appl. (9) 102 (2014), no. 4, 702–757. **IF: 1.683 (Q1)**
Cited 9 times
38. Iliev, Atanas; **Katzarkov, Ludmil**; Przyjalkowski, Victor, *Double solids, categories and non-rationality*, Proc. Edinb. Math. Soc. (2) 57 (2014), no. 1, 145–173. **IF: 0.477 (Q3)**
Cited 8 times
39. Abouzaid, Mohammed; Auroux, Denis; Efimov, Alexander I.; **Katzarkov, Ludmil**; Orlov, Dmitri, *Homological mirror symmetry for punctured spheres*, J. Amer. Math. Soc. 26 (2013), no. 4, 1051–1083. **IF: 3.061 (Q1)**
Cited 27 times
40. **Katzarkov, Ludmil**; Przyjalkowski, Victor, *Landau-Ginzburg models—old and new*, International Press, Somerville, MA, 2012, 97–124. ISBN: 978-1-57146-243-5

41. Eyssidieux, P.; **Katzarkov, L.**; Pantev, T.; Ramachandran, M., *Linear Shafarevich conjecture*, Ann. of Math. (2) 176 (2012), no. 3, 1545–1581. **IF: 3.027 (Q1)**
Cited 16 times

42. Ballard, Matthew; Favero, David; **Katzarkov, Ludmil**, *Orlov spectra: bounds and gaps*, Invent. Math. 189 (2012), no. 2, 359–430. **IF: 2.259 (Q1)**
Cited 31 times

43. Kapustin, Anton; **Katzarkov, Ludmil**; Orlov, Dmitri; Yotov, Mirroslav, *Homological mirror symmetry for manifolds of general type*, Cent. Eur. J. Math. 7 (2009), no. 4, 571–605. **IF: 0.361 (Q4)**
Cited 21 times

44. **Katzarkov, L.**; Pantev, T.; Toën, B., *Algebraic and topological aspects of the schematization functor*, Compos. Math. 145 (2009), no. 3, 633–686. **IF: 1.246 (Q1)**
Cited 9 times

45. **Katzarkov, L.**; Kontsevich, M.; Pantev, T., *Hodge theoretic aspects of mirror symmetry*, Proc. Sympos. Pure Math., 78, American Mathematical Society, Providence, RI, 2008, 87–174. ISBN: 978-0-8218-4430-4.

46. **Katzarkov, L.**; Pantev, T.; Toën, B., *Schematic homotopy types and non-abelian Hodge theory*, Compos. Math. 144 (2008), no. 3, 582–632. **IF: 0.993 (Q1)**
Cited 9 times

47. Auroux, Denis; **Katzarkov, Ludmil**; Orlov, Dmitri, *Mirror symmetry for weighted projective planes and their noncommutative deformations*, Ann. of Math. (2) 167 (2008), no. 3, 867–943. **IF: 3.447 (Q1)**
Cited 82 times

48. Auroux, Denis; **Katzarkov, Ludmil**, *A degree doubling formula for braid monodromies and Lefschetz pencils*, Pure Appl. Math. Q. 4 (2008), no. 2, 237–318. **IF: 0.523 (Q3)**
Cited 6 times

49. Auroux, Denis; **Katzarkov, Ludmil**; Orlov, Dmitri, *Mirror symmetry for del Pezzo surfaces: vanishing cycles and coherent sheaves*, Invent. Math. 166 (2006), no. 3, 537–582. **IF: 1.659 (Q1)**

Cited 79 times

50. Alexeev, V.; **Katzarkov, L.**, *On K-stability of reductive varieties*, Geom. Funct. Anal. 15 (2005), no. 2, 297–310. **IF: 0.966 (Q1)**

Cited 17 times

51. Auroux, Denis; Donaldson, Simon K.; **Katzarkov, Ludmil**, *Singular Lefschetz pencils*, Geom. Topol. 9 (2005), 1043–1114. **IF: 1.275 (Q1)**

Cited 49 times

52. Auroux, D.; Donaldson, Yau; **Katzarkov, L.**; Yotov, M., *Fundamental groups of complements of plane curves and symplectic invariants*, Topology 43 (2004), no. 6, 1285–1318. **IF: 0.727 (Q1)**

Cited 18 times

53. **Katzarkov, Ludmil**; Pantev, Tony; Simpson, Carlos, *Density of monodromy actions on non-abelian cohomology*, Adv. Math. 179 (2003), no. 2, 155–204. **IF: 0.930 (Q1)**

54. Auroux, D.; Donaldson, S. K.; **Katzarkov, L.**, *Luttinger surgery along Lagrangian tori and non-isotopy for singular symplectic plane curves*, Math. Ann. 326 (2003), no. 1, 185–203. **IF: 0.954 (Q1)**

Cited 75 times

55. **Katzarkov, Ludmil**; Pantev, Tony, *Nonabelian (p,p) classes*, Int. Press Lect. Ser., 3, II, International Press, Somerville, MA, 2002, 625–715. ISBN: 1-57146-091-8.

56. Bogomolov, Fedor; **Katzarkov, Ludmil**; Pantev, Tony, *Hyperelliptic Szpiro inequality*, J. Differential Geom. 61 (2002), no. 1, 51–80. **IF: 0.478 (Q2)**

Cited 5 times

57. Amorós, J.; Bogomolov, F.; **Katzarkov, L.**; Pantev, T., *Symplectic Lefschetz fibrations with arbitrary fundamental groups*, J. Differential Geom. 53 (1999), no. 3, 489–545. **IF: 0.650 (Q1)**

Cited 35 times

58. Auroux, Denis; **Katzarkov, Ludmil**, *Branched coverings of CP^2 and invariants of symplectic 4-manifolds*, Invent. Math. 142 (2000), no. 3, 631–673. **IF: 1.607 (Q1)**

Cited 19 times

59. Daskalopoulos, Georgios; **Katzarkov, Ludmil**; Wentworth, Richard, *Harmonic maps to Teichmüller space*, Math. Res. Lett. 7 (2000), no. 1, 133–146. **IF: 0.729 (Q1)**

Cited 3 times

60. Bogomolov, F.; **Katzarkov, L.**, *Infinite groups in projective and symplectic geometry*, London Math. Soc. Lecture Note Ser., 260, Cambridge University Press, Cambridge, 1999, 85–123. ISBN: 0-521-65588-9.

61. **Katzarkov, L.**; Ramachandran, M., *On the universal coverings of algebraic surfaces*, Ann. Sci. École Norm. Sup. (4) 31 (1998), no. 4, 525–535. **IF: 0.941 (Q1)**

Cited 11 times

62. Borchers, Richard E.; **Katzarkov, Ludmil**; Pantev, Tony; Shepherd-Barron, N. I., *Families of K3 surfaces*, J. Algebraic Geom. 7 (1998), no. 1, 183–193.

Cited 40 times

63. Bogomolov, F.; **Katzarkov, L.**, *Complex projective surfaces and infinite groups*, Geom. Funct. Anal. 8 (1998), no. 2, 243–272. **IF: 0.753 (Q1)**

Cited 9 times

64. **Katzarkov, L.**, *On the Shafarevich maps*, Proc. Sympos. Pure Math., 62, Part 2, American Mathematical Society, Providence, RI, 1997, 173–216. ISBN: 0-8218-0895-8; 0-8218-0493-6.

65. **Katzarkov, L.**, *Nilpotent groups and universal coverings of smooth projective varieties*, J. Differential Geom. 45 (1997), no. 2, 336–348. **IF: 0.929 (Q1)**

Cited 5 times

66. **Katzarkov, L.**; Pantev, T., *Stable G2 bundles and algebraically completely integrable systems*, Compositio Math. 92 (1994), no. 1, 43–60.

67. **Katzarkov, L.**; Pantev, T., *Representations of fundamental groups whose Higgs bundles are pullbacks*, J. Differential Geom. 39 (1994), no. 1, 103–121.

Cited 3 times

68. **Katzarkov, L.**, *Homological mirror symmetry and algebraic cycles*, Lecture Notes in Phys., 757, Springer-Verlag, Berlin, 2009, 125–152. ISBN: 978-3-540-86374-8.
Cited 3 times
69. **Katzarkov, L.**, *The geometry of large fundamental groups*, J. Math. Sci. (New York) 94 (1999), no. 1, 1100–1110.
Cited 1 times
70. Bogomolov, F.; **Katzarkov, L.**, *Symplectic four-manifolds and projective surfaces*, Topology Appl. 88 (1998), no. 1-2, 79–109. IF: 0.341 (Q3)
Cited 2 times
71. **Katzarkov, Ludmil**, *Factorization theorems for the representations of the fundamental groups of quasiprojective varieties and some applications*, ProQuest LLC, Ann Arbor, MI, 1995, 53 pp. (Thesis)
72. **Katsarkov, L. V.**; Orlov, D. O., *Prym varieties of hyperelliptic curves and their applications to nonlinear equations*. (in Russian) Vestnik Moskov. Univ. Ser. I Mat. Mekh. 1989, no. 2, 43–47, 105.
73. **Katsarkov, L. V.**, *The intersection of quadrics passing through a canonical curve and chord*. (in Russian) Vestnik Moskov. Univ. Ser. I Mat. Mekh. 1987, no. 4, 24–28, 101–106.