

**Список публикаций сотрудников
Сектора алгебры и теории чисел
(2005–2007 гг.)**

Направление «Алгебраическая геометрия и теория чисел; комбинаторные и вероятностные аспекты теории представлений; модальные логики»

Книги, монографии, учебники

1. Michael Tsfasman, Serge Vladut, Dmitry Nogin. *Algebraic Geometry Codes: Basic Notions*. Mathematical Surveys and Monographs, vol. 139. Providence, RI: Amer. Math. Soc. xix+338pp.

Опубликованные статьи

1. Akhiezer, D. N. On the eigenvalues of the Coxeter Laplacian, *Journal of Algebra*, 313 (2007), p. 4 – 7.
2. V. Golyshev. Mirror duality and classification problems, in: N. Young, *Surveys in Geometry and Number Theory*, London Mathematical Society Lecture Note Series Volume 338, 2007.
3. V. Golyshev, J. Stienstra. Fuchsian equations of type DN, *Comm. Numb. Th. Phys*, vol. 2, no. 1, 2007.
4. A. Samohin. On the D-affinity of quadrics in positive characteristic, *C.R. Acad. Sci. Paris*, Ser. I 344 (2007), pp. 377-382.
5. A. Samohin. Some remarks on the derived categories of coherent sheaves on homogeneous spaces, *J. London Math. Soc.* (2) 76 (2007), pp. 122-134.
6. A. Samohin. On the derived category of coherent sheaves on a 5-dimensional Fano variety. *C.R. Acad. Sci. Paris*, Ser. I 340 (2005), pp. 889-893
7. A. Samohin. A vanishing theorem for sheaves of small differential operators in positive characteristic. *arXiv: 0707.0913* (2007)
8. A. Samohin. Tilting bundles on some Fano varieties via the Frobenius morphism. *MPI preprint*, No. 71 (2007)
9. D.Panyushev. Semi-direct products of Lie algebras and their invariants, *Publ. R.I.M.S.*, 43, no. 4 (2007), 1199-1257.
10. D.Panyushev, O. Yakimova. Symmetric pairs and associated commuting varieties, *Math. Proc. Camb. Phil. Soc.*, 143, Part 2 (2007), 307-321.
11. D.Panyushev, A.Premet, and O.~Yakimova. On symmetric invariants of centralisers in reductive Lie algebras, *J. Algebra*, 313 (2007), 343-391.
12. D.Panyushev. On the coadjoint representation of $\{\mathbb{B} Z\}_2$ -contractions of reductive Lie algebras, *Advances in Math.*, 213 (2007), 380-404.
13. Shapirovsky I. Modal logics of closed domains on Minkowski plane. *Journal of Applied Non-Classical Logics*. 2007. Vol. 17, no. 3. Pp. 283-316.
14. И.Б. Шапировский. О модальных логиках некоторых геометрических структур. *Проблемы передачи информации*. 2007. Т. 43, 3. С. 97-104.
15. V. Shehtman. On neighbourhood semantics 30 years later. We Will Show Them! *Essays in Honour of Dov Gabbay*, v. 2. College Publications, 2005, pp. 663-692.
16. Valentin B. Shehtman. Completeness and incompleteness in first-order modal logic: an overview. *Advances in Modal Logic*, 2006: 27-30
17. V. Shehtman. Filtration via bisimulation. In: *Advances in Modal Logic*, v. 5. R. Schmidt et al., eds. King's College Publications, 2005, pp. 289-308.
18. Valentin B. Shehtman. New results on neighbourhood semantics for modal and intermediate logics. *Algebraic and topological methods in non-classical logics II*. 2005: 72-73

19. Shapirovsky I. "Downward-directed transitive frames with universal relations". In I. Hodkinson and Y. Venema, editors, *Advances in Modal Logic* - Volume 6, pages 413-428 King's College Publications, 2006.
20. Balbiani Ph., Shapirovsky I., Shehtman V. "Every world can see a Sahlqvist world". In I. Hodkinson and Y. Venema, editors, *Advances in Modal Logic* - Volume 6, pages 69-85. King's College Publications, 2006.
21. Shapirovsky I. On PSPACE decidability in Transitive Modal Logics. In: *Advances in Modal Logic*, Volume 5. R. Schmidt et al. (eds.). King's College Publications, 2005, 269-287.
22. Shapirovsky I., Shehtman V. Modal Logics of Regions and Minkowski Spacetime. *J Logic Computation*, 2005 15: 559-574
23. Д.Ю. Ногин. Весовые функции и обобщенные веса линейных кодов, *Пробл. передачи информ.*, 2005, Т. 41, № 2, С. 26–41.
24. А.М. Барг, Д.Ю. Ногин. Спектральный подход к границам линейного программирования для кодов. *Пробл. передачи информ.*, 2006, Т. 42, № 2, С. 12–25.
25. Концевич М., Канель-Белов А. Automorphisms of the Weyl algebra. *Lett. Math. Phys.*, 2005, vol. 74, no. 2, pp.181-199.
26. Kontsevich M., Chen Y., Schwarz A.S. Symmetries of WDVV equations. *Nucl.Phys.*, 2005, B730, pp. 352-363.
27. Полякова Ю.М. Категории лог-терминальных пар и автоморфизмы поверхностей. *ВИНИТИ РАН*. 2005 № 596-Б2005, 60 с.
28. Akhiezer D.N. Real forms of complex reductive groups acting on quasi-affine varieties. *Amer. Math. Soc. Transl.* (2), Providence, RI, 2005, vol. 213, pp. 1-13.
29. Borodin A. and Olshanski G. Harmonic analysis on the infinite-dimensional unitary group and determinantal point processes. *Annals of Mathematics*, 2005, vol. 161, no.3, pp. 1319-1422.
30. Borodin A. and Olshanski G. Random partitions and the Gamma kernel. *Advances in Mathematics*, 2005, vol. 194, no. 1, pp. 141-202.
31. Borodin A. and Olshanski G. Representation theory and random point processes. In: A. Laptev (editor), *European congress of mathematics*. Zürich: European Mathematical Society, 2005, pp. 73-94.
32. Borodin A. and Olshanski G. Z-measures on partitions and their scaling limits. *European Journal of Combinatorics*, 2005, vol. 26, no. 6, pp. 795-834.
33. Borodin A. and Olshanski G. Eynard-Mehta theorem, Schur process, and their Pfaffian analogs. *Journal of Statistical Physics*, 2005, vol. 121, no. 3-4, pp. 291-317.
34. Margulis G., Fisher D. Almost isometric actions, property (T), and local rigidity. *Inventiones Mathematicae*, 2005, vol. 162, pp. 19-80
35. Panyushev D.I. An extension of Raïs' theorem and seaweed subalgebras of simple Lie algebras. *Annales Inst. Fourier*, 2005, vol. 55, no. 3, pp. 693-715.
36. Panyushev D.I. Ideals of Heisenberg type and minimax elements of affine Weyl groups. In: *Amer. Math. Soc. Transl., Series 2. "Lie Groups and Invariant Theory"* (E.B. Vinberg, Ed.), Providence, RI, 2005, vol. 213, pp. 191-213.
37. Panyushev D.I. On invariant theory of θ -groups. *J. Algebra*, 2005, vol. 283, pp. 655-670.
38. Panyushev D.I., Rohrle G. On spherical ideals of Borel subalgebras, *Archiv der Math.*, 84(2005), 225--232.
39. Vishik A. On the Chow groups of Quadratic Grassmannians. *Documenta Mathematica*, 2005, vol. 10, pp. 111-130.
40. Vishik, A. Symmetric operations in algebraic cobordism. *Adv. Math.* 213 (2007), no. 2, 489-552.
41. Vishik, A. Generic points of quadrics and Chow groups. *Manuscripta Math.* 122 (2007), no. 3, 365-374.

42. Orlov, D.; Vishik, A.; Voevodsky, V. An exact sequence for $\mathrm{K}^{\mathrm{sp}} \mathrm{M}^{\mathrm{sb}} */2$ with applications to quadratic forms. *Ann. of Math.* (2) 165 (2007), no. 1, 1-13.
43. Ghorpade, Sudhir R.; Tsfasman, Michael A. Schubert varieties, linear codes and enumerative combinatorics. *Finite Fields Appl.* 11 (2005), no. 4, 684-699.
44. Tsfasman, M. A. Asymptotic behaviour of the Euler-Kronecker constant. *Algebraic geometry and number theory*, 453-458, Progr. Math., 253, Birkhäuser Boston, Boston, MA, 2006.
45. С. Ю. Рыбаков. Кручение абелевых поверхностей над конечными полями и приложения к якобианам кривых рода 3 и поверхностям Куммера,. Депонировано в ВИНИТИ РАН, 2007, 935-В2007, 35 с.
46. S. Rybakov. Zeta-functions of conic bundles and Dell-Pezzo surfaces of degree 4 over finite fields. *Moscow Math. Journal*, 5:4 (2005), 919-926.
47. С. Ю. Рыбаков. Дзета-функции расслоений на коники и поверхности дель-Пеццо степени 4 над конечными полями. *Успехи математических наук*, 60:5 (2005), 986-987.
48. A. Barg, D.Yu. Nogin. A Bound on Grassmannian Codes, *J. Combin. Theory, Ser. A (J.H. Van Lint memorial issue)*, 2006, vol. 113, pp. 1629–1635.

Статьи, принятые к публикации

1. B. E. Kunyavskii, M. A. Tsfasman. Brauer-Siegel theorem for elliptic surfaces. Принята к печати в *International Math Research Notices*.
2. С. Ю. Рыбаков. Дзета-функции биэллиптических поверхностей. Принята к печати в *Математические заметки* 83:2 (2008), 278-290.

Тезисы докладов

1. Akhiezer, D. N. Weakly symmetric spaces, p. 12 - 13 in: Abstracts of Talks, *International Conference "Transformation groups" (in honour of E.B.Vinberg)* , December 17 - 22, 2007, Moscow, Independent University of Moscow.
2. И.Б. Шапировский. "О свойствах некоторых транзитивных логик с универсальной модальностью" *Труды XXV Конференции молодых ученых*. М.: Мех-мат ф-т МГУ, 2006, 233-236.