

# List of papers by Maxim Vsemirnov

## (i) Book chapters

- B1 M. C. Tamburini and M. Vsemirnov. Hurwitz groups and Hurwitz generation. Handbook of Algebra, vol. 4. pp. 385–426, Elsevier, 2006. **Invited chapter.**

## (ii) Journal papers (refereed)

- J21 M. Vsemirnov. On  $(2, 3)$ -generation of matrix groups over the ring of integers. Algebra i Analiz 19 (2007), no. 6, pp. 22–58 (in Russian). English translation is to appear in St. Petersburg Math. J.
- J20 P. Cegielski, D. Richard and M. Vsemirnov, On the additive theory of prime numbers, Fundamenta Informaticae 81 (2007), pp. 83–96.
- J19 M. Vsemirnov. The group  $GL_6(\mathbb{Z})$  is  $(2, 3)$ -generated. J.Group Theory 10 (2007), no.4, pp. 425–430.
- J18 M. C. Tamburini and M. Vsemirnov. Irreducible  $(2,3,7)$ -subgroups of  $PGL_n(F)$ ,  $n \leq 7$ . J. Algebra 300 (2006), pp. 339–362.
- J17 M. Vsemirnov, Is the group  $SL(6, \mathbb{Z})$   $(2,3)$ -generated? Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 330 (2006), no. 1, pp. 101–130 (in Russian). English translation: J. Math. Sci. (N. Y.) 140 (2007), no. 5, 660–675.
- J16 M. Vsemirnov. The groups  $G_2(p)$ ,  $p \geq 5$  as quotients of  $(2, 3, 7; 2p)$ . Transformation Groups 11 (2006), no. 2, pp. 295–304.
- J15 M. Vsemirnov. Hurwitz groups of intermediate rank. LMS J. Comput. Math. 7 (2004), pp. 300–336.
- J14 M. Vsemirnov. Automorphisms of projective spaces and min-wise independent sets of permutations, SIAM J. Discrete Math. 18 (2004), no. 3, pp. 592–607.
- J13 M. Vsemirnov. A new Fibonacci-like sequence of composite numbers. J. Integer Sequences 7 (2004), Article 04.3.7.
- J12 O. Etereovski and M. Vsemirnov. On the number of prime divisors of higher-order Carmichael numbers. Fibonacci Quarterly 42, (2004) no. 2, pp. 141–148.
- J11 C. Franchi and M. Vsemirnov, Min-wise independent groups, European J. Combinatorics 24 (2003) pp. 855–875.
- J10 M. A. Vsemirnov and M. G. Rzhetskij, An upper bound for the contact number in dimension 9. Uspekhi Mat. Nauk, 57 (2002), no. 5, pp. 149–150. English translation: Russian Math. Surveys 57 (2002), no. 5, pp. 1015–1016.
- J9 M. A. Vsemirnov, E. A. Hirsch, E. Ya. Dantsin, and S. V. Ivanov, Algorithms for SAT and upper bounds on their complexity. Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 277 (2001), pp. 14–46. English translation: J. Math. Sci. (New York), 118 (2003) no. 2, pp. 4948–4962.
- J8 M. A. Vsemirnov, Two elementary proofs of the Fueter-Pólya theorem on pairing polynomials. St. Petersburg Math. J. 13 (2002), no. 5, pp. 705–715. Correction: ibid. 14 (2003), no. 5, p. 887.
- J7 M. Vsemirnov, The Woods-Erdős conjecture for polynomial rings. Ann. Pure Appl. Logic 113 (2002), no. 1–3, pp. 331–344.
- J6 M. Vsemirnov, V. Mysovskikh, and M. C. Tamburini, Triangle groups as subgroups of unitary groups. J. Algebra 245 (2001), no. 2, pp. 562–583.

- J5 M. A. Vsemirnov, Diophantine representations of linear recurrent sequences. II, Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 241 (1997), pp. 5–29. English translation: J. Math. Sci. (New York), 98 (2000), no. 4, pp. 427–441.
- J4 M. A. Vsemirnov, The Macdonald identities and multidimensional theta-functions, Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 240 (1997), pp. 68–78. English translation: J. Math. Sci. (New York), 96 (1999), no. 5, pp. 3486–3492.
- J3 M. A. Vsemirnov, Diophantine representations of linear recurrent sequences. I, Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 227 (1995), pp. 52–60. English translation: J. Math. Sci. (New York), 89 (1998), no. 2, pp. 1113–1118.
- J2 M. A. Vsemirnov, Infinite sets of primes admitting Diophantine representations in eight variables, Notes of Scientific Seminars of St.Petersburg Division of Steklov Institute of Mathematics (POMI), 220 (1995), pp. 36–48. English translation: J. Math. Sci. (New York), 87 (1997), no. 1, pp. 3200–3208.
- J1 M. A. Vsemirnov, On a class of primality criteria, Matem. Zametki, 56 (1994), no. 1, pp. 146–148. English translation: Mathematical Notes, 56 (1994), nos. 1–2, pp. 754–755.

**(iii) Doctorate thesis**

- T1 M. A. Vsemirnov, Methods of constructing Diophantine representations. Ph.D. Thesis, St.Petersburg University, 1998 (in Russian).

**(iv) Other papers, preprints, work in progress**

- O10 M. Vsemirnov. Recent results on Hurwitz generation. A survey for Russian Mathematical Surveys (manuscript in preparation).
- O9 A.M. Vershik and M.A. Vsemirnov. The local stationary presentation of the alternating groups and normal form. ArXiv:math.GR/0703278. (Submitted to J. Algebra).
- O8 M. C. Tamburini and M. Vsemirnov. Irreducible  $(2, 3, 7)$ -subgroups of  $PGL_n(F)$ ,  $n \leq 7$ , II. Quaderni del Seminario Matematica di Brescia, 17/2007. (Submitted to J. Algebra).
- O7 M. Vsemirnov. Generators for low-dimensional Hurwitz groups. (manuscript in preparation).
- O6 M. Vsemirnov. Groups  $\Omega_7(p^m)$  are not Hurwitz. (manuscript prepared for Communications in Algebra).
- O5 M. Vsemirnov. On the  $q$ -Binomial matrix. (manuscript prepared for European J. Combinatorics).
- O4 M. A. Vsemirnov. On binomial coefficients congruences and some applications. Submitted to Acta Arithmetica (under revision.)
- O3 M. Vsemirnov. Sums of powers and their  $q$ -analogues. Submitted to Electronic J. Combinatorics (under revision.)
- O2 M. Vsemirnov. Min-wise independent sets of permutations and orders on projective planes. Preprint, 7pp.
- O1 V. Bargachev and M. Vsemirnov, Min-wise independent permutations: exact constructions and lower bounds. Preprint, 15 pp.