

SELECTED PUBLICATIONS BY TIMUR SADYKOV

BOOK

1. **Hypergeometric and Algebraic Functions in Several Variables.** (In Russian.) With A.Tsikh. Moscow, Nauka, 2014. 408 pages.

English translation of the book has successfully passed the peer review process by Springer and will hopefully appear next year.

RESEARCH ARTICLES IN REFEREED JOURNALS

2. **Maximally reducible monodromy of bivariate hypergeometric systems.** With S.Tanabe. *Izvestiya Mathematics* 80, no. 1 (2016), 221-262.

3. **Algorithmic computation of polynomial amoebas.** With D.V.Bogdanov and A.A.Kytmanov. *Lecture Notes in Computer Science*, Vol. 9890, 87-100. Springer International Publishing AG, 2016.

4. **Polynomial dynamics of human blood genotypes frequencies.** *Journal of Symbolic Computation* 79 (2017), 342-355.

5. **Rational generating function for the solution to the Cauchy problem for bivariate difference equations.** (In Russian.) With A.P.Lyapin and A.A.Kytmanov. To appear in *Programming and Computer Software* 43, no. 1 (2017).

6. **Analytic complexity of cluster trees.** (In Russian.) With A.Normov. *Appl. Discr. Math.* 24, no. 2 (2014), 79-87.

7. **Linear differential operators for generic algebraic curves.** With V.Krasikov. *Journal of Siberian Federal University. Mathematics and Physics* 6, no. 2 (2013), 200-210.

8. **On the analytic complexity of discriminants.** With V.Krasikov. *Proceedings of the Steklov Institute of Mathematics*, 279 (2012), 78-92.

9. **Hypergeometric systems of equations with maximally reducible monodromy.** *Doklady Mathematics* 423, no. 4 (2008), 455-457.

10. **A discrete version of the Riemann-Hilbert problem.** With Finnur Larusson, *Russian Math. Surveys* 63, no. 5 (2008), 193-194.

11. **Hypergeometric systems with polynomial bases.** *Journal of Siberian Federal University. Mathematics and Physics* 1 (2008), 25-32.

12. **Bases in the solution space of the Mellin system.** With Alicia Dickenstein, *Sbornik Mathematics* 198, (2007), no. 9, 59-80.

13. **Dessins d'enfants and differential equations.** With Finnur Larusson, *Algebra and Analysis* 19 (2007), no. 6, 184-199.

14. **Algebraicity of solutions to the Mellin system and its monodromy.** With Alicia Dickenstein, *Doklady of Russian Academy of Sciences* 412, (2007), no. 4, 1 - 3.

15. **Bivariate hypergeometric D-modules.** With A. Dickenstein and L. Matusevich, *Advances in Mathematics*, 196, no. 1 (2005), 78-123.

16. **Nonconfluent hypergeometric functions in several variables and their singularities.** With Mikael Passare and August Tsikh, *Compositio Mathematica*, 141 (2005), no. 3, 787-810.

17. **The Hadamard product of hypergeometric series.** Bulletin des Sciences Mathematiques 126, no. 1 (2002), 31-43.
18. **On the Horn system of partial differential equations and series of hypergeometric type.** Mathematica Scandinavica 91. no. 1 (2002), 127-149.
19. **On a multidimensional system of hypergeometric differential equations.** Siberian Mathematical Journal 39. no. 5 (1998), 986-997.

OTHER

20. **Hypergeometric polynomials are optimal.** With D.Bogdanov. arXiv:1506.00503v2.
21. **Sparse hypergeometric systems.** Proceedings of Belgorod State University. Mathematics and physics, vol. 13 (68), iss. 17/1 (2009), 64-76.
22. **On a generalization of the Horn hypergeometric system.** Complex Analysis and Differential Operators. Krasnoyarsk State University, (2000), pp 114-126.
23. **Dimension of the solution space of the Horn hypergeometric system.** Complex Analysis and Mathematical Physics. Krasnoyarsk State University, (1998), pp 190-202.
24. **On multidimensional systems of hypergeometric type and their difference analogues.** (In Russian.) Complex Analysis and Differential Equations. Krasnoyarsk State University, (1997), pp 84-94.
25. **On the solution of multidimensional hypergeometric differential equations by means of multidimensional residues.** (In Russian.) Complex Analysis and Differential Equations. Krasnoyarsk State University, (1996), pp 184-196.