List of Publications

Eugene Gorsky

Publications

- 1. Introduction to Heegaard Floer homology. Russian Mathematical Surveys, 74:1 (2019), 1–35.
- 2. (with Y. Bai and O. Kivinen) Quadratic ideals and Rogers-Ramanujan recursions. The Ramanujan Journal. DOI 10.1007/s11139-018-0127-3.
- 3. (with M. Borodzik) Immersed concordances of links and Heegaard Floer homology. Indiana Univ. Math. J. 67 (2018), 1039–1083.
- 4. (with A. Némethi) On the set of L-space surgeries for links. Advances in Mathematics 333 (2018), 386–422.
- 5. (with S. M. Gusein-Zade) Homological indices of collections of 1-forms. Bulletin of the London Mathematical Society 50 (2018), no.2, 261–273.
- 6. (with S. Gukov and M. Stošić) Quadruply-graded colored homology of knots. Fundamenta Mathematicae 243 (2018), 209–299.
- 7. Combinatorics of HOMFLY homology. Appendix to "The Hilbert scheme of a plane curve singularity and the HOMFLY homology of its link" by A. Oblomkov, J. Rasmussen and V. Shende.

 Geometry & Topology 22 (2018) 645–691.
- 8. (with J. Hom) Cable links and L-space surgeries. Quantum Topology 8 (2017), no.4, 629–666.
- 9. (with M. Mazin and M. Vazirani) Rational Dyck Paths in the Non Relatively Prime Case. Electronic Journal of Combinatorics, 24 (2017), no. 3, paper #P3.61
- 10. (with A. Neguţ) Infinitesimal change of stable basis. Selecta Mathematica, New Series, 23 (2017), no. 3, 1909–1930.
- 11. (with M. Mazin) Rational Parking Functions and LLT Polynomials. Journal of Combinatorial Theory, Series A, 140 (2016), 123–140.
- 12. (with M. Mazin and M. Vazirani) Affine permutations and rational slope parking functions. Trans. Amer. Math. Soc. 368 (2016), 8403–8445.
- 13. (with A. Némethi) Links of plane curve singularities are L-space links. Algebraic and Geometric Topology 16 (2016) 1905–1912.
- 14. (with A. Némethi) Lattice and Heegaard–Floer homologies of algebraic links. Int. Math. Res. Not. IMRN 2015, no. 23, 12737–12780.
- 15. (with P. Etingof and I. Losev) Representations of Rational Cherednik algebras with minimal support and torus knots. Advances in Mathematics **277** (2015), 124-180.
- 16. (with A. Neguț) Refined knot invariants and Hilbert schemes.

 Journal de Mathématiques Pures and Appliquées 104 (2015), 403-435.
- 17. (with L. Lewark) On stable sl_3 -homology of torus knots. Experimental Mathematics **24** (2015), 162–174.

- 18. (with A. Oblomkov, J. Rasmussen and V. Shende) Torus knots and the rational DAHA.
 - Duke Math. J. **163** (2014), no. 14, 2709–2794.
- 19. The equivariant Euler characteristic of moduli spaces of curves. Advances in Mathematics **250** (2014), 588–595.
- 20. (with M. Mazin) Compactified Jacobians and q, t-Catalan numbers, II. Journal of Algebraic Combinatorics, **39** (2014), no. 1, 153–186.
- 21. (with A. Oblomkov and J. Rasmussen) On stable Khovanov homology of torus knots. Experimental Mathematics, **22** (2013), 265–281.
- 22. Arc spaces and DAHA representations. Selecta Mathematica, New Series, **19** (2013), no. 1, 125–140.
- 23. (with M. Mazin) Compactified Jacobians and q, t-Catalan Numbers, I. Journal of Combinatorial Theory, Series A, 120 (2013) 49–63.
- 24. q, t-Catalan numbers and knot homology. Zeta Functions in Algebra and Geometry, 213–232. Contemp. Math. **566**, Amer. Math. Soc., Providence, RI, 2012.
- 25. Combinatorial computation of the motivic Poincare series. Journal of Singularities, **3** (2011), 48–82
- 26. Adams Operations and Power Structures.

 Moscow Mathematical Journal, 9 (2009), no. 2, 305–323.
- 27. On the S_n -equivariant Euler characteristic of moduli spaces of hyperelliptic curves. Mathematical Research Letters, **16** (2009), no. 4, pp. 591–603.
- 28. Symmetries of some motivic integrals. Russian Mathematical Surveys, **63** (2008), no. 4 (382), 179–180.
- 29. On the motivic measure on the space of functions. Revista Matematica Complutense, **20** (2007), no. 2, 507–521.
- 30. Motivic integration and functional equations. Algebra and Analysis (Journal of the St. Petersburg Mathematical Society), **19** (2007), no. 4, 92–112.
- 31. On divisorial filtrations on sheaves.

 Mathematical notes, **79** (2006), no. 6, 825–837.
- 32. (with V. Gurovits, I. Mezhirov and E. Osmova). The Richman game. Matematicheskoe prosveshenie, **3** (2001), no. 5, 78–191.

Preprints

- 1. (with G. Hawkes, A. Schilling, J. Rainbolt) Generalized q,t-Catalan numbers. arXiv:1905.10973
- 2. (with P. Wedrich) Evaluations of annular Khovanov-Rozansky homology. arXiv:1904.04481
- 3. (with M. Hogancamp, A. Mellit and K. Nakagane) Serre duality for Khovanov-Rozansky homology. arXiv:1902.08281
- 4. (with B. Liu and A. Moore) Surgery on links of linking number zero and the Heegaard Floer d-invariant. arXiv:1810.10178
- (with M. Hogancamp) Hilbert schemes and y-ification of Khovanov-Rozansky homology. arXiv:1712.03938
- 6. (with E. Carlsson and A. Mellit) The $A_{q,t}$ algebra and parabolic flag Hilbert schemes. arXiv:1710.01407

- 7. (with A. Neguţ and J. Rasmussen) Flag Hilbert schemes, colored projectors and Khovanov–Rozansky homology. arXiv:1608.07308
- 8. (with M. Gorsky) Distinguished bases for A_n root systems and parking functions. arXiv: 1112.0381
- 9. Seifert cohomology of trees. arXiv: 0901.1298
- 10. On the S_n -equivariant Euler characteristic of $\mathcal{M}_{2,n}$. arXiv: 0707.2662