

List of publications
Eugene Gorsky

Publications

1. (with M. Hogancamp) Hilbert schemes and y-ification of Khovanov-Rozansky homology. To appear in *Geometry & Topology*, arXiv:1712.03938
2. (with M. Hogancamp, P. Wedrich) Derived traces of Soergel categories. To appear in *International Mathematics Research Notices*. DOI 10.1093/imrn/rnab019
3. (with A. Neguț and J. Rasmussen) Flag Hilbert schemes, colored projectors and Khovanov-Rozansky homology. *Advances in Mathematics* 378 (2021) 107542.
4. (with G. Hawkes, A. Schilling, J. Rainbolt) Generalized q,t -Catalan numbers. *Algebraic Combinatorics* 3 (2020) no. 4, 855-886.
5. (with B. Liu and A. Moore) Surgery on links of linking number zero and the Heegaard Floer d -invariant. *Quantum Topology* 11 (2020), 323-378.
6. (with Y. Bai and O. Kivinen) Quadratic ideals and Rogers-Ramanujan recursions. *The Ramanujan Journal*, *The Ramanujan Journal* 52 (2020), 67-89.
7. (with E. Carlsson and A. Mellit) The $\mathbb{A}_{q,t}$ algebra and parabolic flag Hilbert schemes. *Mathematische Annalen* 376 (2020), 1303-1336.
8. (with M. Mazin and M. Vazirani) Recursions for rational q,t -Catalan numbers. *Journal of Combinatorial Theory, Series A* 173 (2020), Article 105237.
9. (with M. Hogancamp, A. Mellit and K. Nakagane) Serre duality for Khovanov-Rozansky homology. *Selecta Mathematica*, 25 (2019), no. 5, Article 79.
10. Introduction to Heegaard Floer homology. *Russian Mathematical Surveys*, 74:1 (2019), 1-35.
11. (with M. Borodzik) Immersed concordances of links and Heegaard Floer homology. *Indiana Univ. Math. J.* 67 (2018), 1039-1083.
12. (with A. Némethi) On the set of L-space surgeries for links. *Advances in Mathematics* 333 (2018), 386-422.
13. (with S. M. Gusein-Zade) Homological indices of collections of 1-forms. *Bulletin of the London Mathematical Society* 50 (2018), no.2, 261-273.
14. (with S. Gukov and M. Stošić) Quadruply-graded colored homology of knots. *Fundamenta Mathematicae* 243 (2018) , 209-299.
15. 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.
16. (with J. Hom) Cable links and L-space surgeries. *Quantum Topology* 8 (2017), no.4, 629-666.
17. (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
18. (with A. Neguț) Infinitesimal change of stable basis. *Selecta Mathematica, New Series*, 23 (2017), no. 3, 1909–1930.
19. (with M. Mazin) Rational Parking Functions and LLT Polynomials. *Journal of Combinatorial Theory, Series A*, 140 (2016), 123-140.
20. (with M. Mazin and M. Vazirani) Affine permutations and rational slope parking

functions.

Trans. Amer. Math. Soc. 368 (2016), 8403-8445.

21. (with A. Némethi) Links of plane curve singularities are L-space links. Algebraic and Geometric Topology 16 (2016) 1905-1912.
22. (with A. Némethi) Lattice and Heegaard–Floer homologies of algebraic links. Int. Math. Res. Not. IMRN 2015, no. 23, 12737–12780.
23. (with P. Etingof and I. Losev) Representations of Rational Cherednik algebras with minimal support and torus knots. Advances in Mathematics 277 (2015), 124-180.
24. (with A. Neguţ) Refined knot invariants and Hilbert schemes. Journal de Mathématiques Pures and Appliquées 104 (2015), 403-435.
25. (with L. Lewark) On stable sl_3 -homology of torus knots. Experimental Mathematics 24 (2015), 162–174.
26. (with A. Oblomkov, J. Rasmussen and V. Shende) Torus knots and the rational DAHA. Duke Math. J. 163 (2014), no. 14, 2709–2794.
27. The equivariant Euler characteristic of moduli spaces of curves. Advances in Mathematics 250 (2014), 588–595.
28. (with M. Mazin) Compactified Jacobians and q, t -Catalan numbers, II. Journal of Algebraic Combinatorics, 39 (2014), no. 1, 153–186.
29. (with A. Oblomkov and J. Rasmussen) On stable Khovanov homology of torus knots. Experimental Mathematics, 22 (2013), 265–281.
30. Arc spaces and DAHA representations. Selecta Mathematica, New Series, 19 (2013), no. 1, 125–140.
31. (with M. Mazin) Compactified Jacobians and q, t -Catalan Numbers, I. Journal of Combinatorial Theory, Series A, 120 (2013) 49–63.
32. q, t -Catalan numbers and knot homology. Zeta Functions in Algebra and Geometry, 213–232. Contemp. Math. 566, Amer. Math. Soc., Providence, RI, 2012.
33. Combinatorial computation of the motivic Poincare series. Journal of Singularities, 3 (2011), 48–82
34. Adams Operations and Power Structures. Moscow Mathematical Journal, 9 (2009), no. 2, 305–323.
35. On the S_n -equivariant Euler characteristic of moduli spaces of hyperelliptic curves. Mathematical Research Letters, 16 (2009), no. 4, pp. 591–603.
36. Symmetries of some motivic integrals. Russian Mathematical Surveys, 63 (2008), no. 4 (382), 179–180.
37. On the motivic measure on the space of functions. Revista Matemática Complutense, 20 (2007), no. 2, 507–521.
38. Motivic integration and functional equations. Algebra and Analysis (Journal of the St. Petersburg Mathematical Society), 19 (2007), no. 4, 92–112.
39. On divisorial filtrations on sheaves. Mathematical notes, 79 (2006), no. 6, 825–837.
40. (with V. Gurovits, I. Mezhirov and E. Osmova). The Richman game. Matematicheskoe prosveshenie, 3 (2001), no. 5, 78–191.

Preprints

1. (with R. Casals, M. Gorsky and J. Simental) Positroid Links and Braid varieties. arXiv:2105.13948
2. (with M. Hogancamp and A. Mellit) Tautological classes and symmetry in Khovanov-Rozansky homology. arXiv:2103.01212
3. (with A. Beliakova) Cyclotomic expansions for $gl(N)$ knot invariants via interpolation Macdonald polynomials. arXiv:2101.08243
4. (with R. Casals, M. Gorsky and J. Simental) Algebraic weaves and braid varieties. arXiv:2012.06931
5. (with T. Lidman, B. Liu, A. Moore) Triple linking numbers and Heegaard Floer homology. arXiv:2006.15484
6. (with J. Simental, M. Vazirani) Parabolic Hilbert schemes via the Dunkl-Opdam subalgebra. arXiv:2004.14873
7. (with P. Wedrich) Evaluations of annular Khovanov-Rozansky homology. arXiv:1904.04481
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