

List of publications

Anton Khoroshkin

Submitted:

1. "Highest weight categories and Macdonald polynomials"
Preprint available at math.arxiv.org:1312.7053, 33pp.
2. "Differentials on graph complexes II - hairy graphs" (with T. Willwacher and M. Živković)
Preprint available at math.arxiv.org:1508.01281.

Accepted or Published:

3. "On Quantizable Odd Lie Bialgebras" (with S. Merkulov and T. Willwacher)
Letters in Mathematical Physics, 106(9), (2016) 1199–1215
4. "Differentials on graph complexes" (with T. Willwacher and M. Živković)
accepted by Advances in Mathematics (2016)
5. "Characteristic classes of flags of foliations and Lie algebra cohomology"
Transformation groups, Volume 21, (2016), Issue 2, pp 479–518
6. "On generating series of finitely presented operads" (with D. Piontkovski),
Journal of Algebra, Volume 426, 2015, pp. 377–429
7. "Macdonald Polynomials and BGG reciprocity for current algebras"
(with A. Berenstein, M. Bennet, V. Chari, S. Loktev) //
Selecta Mathematica New series, April 2014, Volume 20, Issue 2, pp 585–607
8. "Quillen Homology for operads via Gröbner bases" (with V. Dotsenko),
Documenta Mathematica. 18 (2013) pp. 707–747
9. "Hypercommutative operad as a homotopy quotient of BV." (with N. Markarian and S. Shadrin)
Communications in Mathematical Physics, Volume 322, Issue 3 (2013), pp. 697–729
10. "Shuffle Algebras, Homology and Consecutive Pattern Avoidance" (with V. Dotsenko),
Algebra & number theory, 7:3 (2013) pp.673–700
11. "Using homological duality in consecutive pattern avoidance" (with B. Shapiro)
Electronic J. of Combinatorics, vol.18(2), 2011, 17 pp.
12. "Gröbner bases for operads" (with V. Dotsenko)
Duke Math. J. 153 (2010), no. 2, 363–396.
13. "On syzygies of highest weight orbits." (with A. L. Gorodentsev and A. N. Rudakov)
Moscow Seminar on Mathematical Physics. II, 79120, Amer. Math. Soc. Transl. Ser. 2, 221, Amer. Math. Soc., Providence, RI, 2007
14. "Quadratic algebras related to the bihamiltonian operad" (with M. Bershtein and V. Dotsenko)
IMRN 2007, no. 24, Art. ID rnm122, 30 pp.
15. "Character formulas for the operad of two compatible brackets and for the bi-Hamiltonian operad" (with V. Dotsenko)
Funct. Anal. Appl. 41 (2007), no. 1, 1–17

16. “Syzygies of some quadratic varieties and their connection with the cohomology of Lie algebras”
Russian Math. Surveys 61 (2006), no. 5, 990–992
17. “Lie algebra of formal vector fields extended by formal \mathfrak{g} -valued functions”
Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI) 335 (2006), 205–230; translation in *J. Math. Sci. (N. Y.)* 143 (2007), no. 1, 2816–2830,

Preprints:

18. “Anick-type resolutions and consecutive pattern avoidance” (with V. Dotsenko)
Preprint available at math.arXiv:1002.2761, 16 pp.
19. “Free resolutions via Gröbner bases” (with V. Dotsenko)
Preprint available at math.arxiv:0912.4895, 24 pp.
20. “Lie algebra of formal vector fields that preserve the foliation structure”
preprint in russian ITEP-TH-09/07, available as VINITI RAS, N1376-B2006, – 2006, – 38pp.
21. “Koszul operads and distributive lattices”
Preprint ITEP-TH available at http://elib.itep.ru/Mathphys/psfiles/05_95.ps

Articles in preparation:

22. “Rational homotopy theory of group actions on operads and framed little n -discs operads”, (with V. Turchin and T. Willwacher)
23. “Gröbner bases for dioperads” (with V. Dotsenko),
24. “On Hilbert series of wheeled operads”