

List of papers

1. Peer-reviewed papers

- [1] H. Abe, M. Harada, T. Horiguchi, and M. Masuda, The equivariant cohomology rings of regular nilpotent Hessenberg varieties in Lie type A: Research Announcement, *Morfismos*, **18** (2014), No. 2, 51–65.
- [2] M. Harada, T. Horiguchi, and M. Masuda, The equivariant cohomology rings of Peterson varieties in all Lie types. *Canad. Math. Bull.* **58** (2015), no. 1, 80–90.
- [3] T. Horiguchi, The S^1 -equivariant cohomology rings of $(n-k, k)$ Springer varieties, *Osaka J. Math.* **52** (2015), no. 4, 1051–1062.
- [4] H. Abe, T. Horiguchi, The torus equivariant cohomology rings of Springer varieties, *Topology Appl.* **208** (2016), 143–159.
- [5] T. Horiguchi, The cohomology rings of regular nilpotent Hessenberg varieties and Schubert polynomials, *Proc. Japan Acad. Ser. A Math. Sci.* **94** (2018), no. 9, 87–92.
- [6] H. Abe, T. Horiguchi, and M. Masuda, The cohomology rings of regular semisimple Hessenberg varieties for $h = (h(1), n, \dots, n)$, *J. Comb.* **10** (2019), no. 1, 27–59.
- [7] H. Abe, M. Harada, T. Horiguchi, and M. Masuda, The cohomology rings of regular nilpotent Hessenberg varieties in Lie type A, *Int. Math. Res. Not. IMRN* **2019** (2019), 5316–5388.
- [8] M. Harada, T. Horiguchi, M. Masuda, and S. Park, The volume polynomial of regular semisimple Hessenberg varieties and the Gelfand-Zetlin polytope, *Proceedings of the Steklov Institute of Mathematics* **305** (2019), 318–344.
- [9] T. Abe, T. Horiguchi, M. Masuda, S. Murai, and T. Sato, Hessenberg varieties and hyperplane arrangements, *to appear in J. Reine Angew. Math.*, DOI: 10.1515/crelle-2018-0039.
- [10] H. Abe and T. Horiguchi, A survey of recent developments on Hessenberg varieties to appear in *the Proceedings volume of the conference in Schubert Calculus, Guangzhou, November 2017*.

2. Preprints

- [1] M. Enokizono, T. Horiguchi, T. Nagaoka, and A. Tsuchiya, Uniform bases for ideal arrangements, arXiv:1912.02448.
- [2] M. Enokizono, T. Horiguchi, T. Nagaoka, and A. Tsuchiya, An additive basis for the cohomology rings of regular nilpotent Hessenberg varieties, arXiv:1912.11763.
- [3] M. Harada, T. Horiguchi, S. Murai, M. Precup, and J. Tymoczko, A filtration on the cohomology rings of regular nilpotent Hessenberg varieties, arXiv:1912.12892.