

List of papers

1. Peer-reviewed papers

- [1] Megumi Harada, Tatsuya Horiguchi, Satoshi Murai, Martha Precup, and Julianna Tymoczko, A filtration on the cohomology rings of regular nilpotent Hessenberg varieties, to appear in *Math. Z.* DOI:10.1007/s00209-020-02646-x
- [2] Hiraku Abe and Tatsuya Horiguchi, A survey of recent developments on Hessenberg varieties, *Schubert Calculus and Its Applications in Combinatorics and Representation Theory Guangzhou, China, November 2017* **332** (2020), 251–279.
- [3] Takuro Abe, Tatsuya Horiguchi, Mikiya Masuda, Satoshi Murai, and Takashi Sato, Hessenberg varieties and hyperplane arrangements, *J. Reine Angew. Math.(crelle)* **764** (2020), 241–286.
- [4] Megumi Harada, Tatsuya Horiguchi, Mikiya Masuda, and Seonjeong Park, The volume polynomial of regular semisimple Hessenberg varieties and the Gelfand-Zetlin polytope, *Tr. Mat. Inst. Steklova* **305** (2019), 344–373.
- [5] Hiraku Abe, Megumi Harada, Tatsuya Horiguchi, and Mikiya Masuda, The cohomology rings of regular nilpotent Hessenberg varieties in Lie type A, *Int. Math. Res. Not. IMRN* **2019** (2019), 5316–5388.
- [6] Hiraku Abe, Tatsuya Horiguchi, and Mikiya 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] Tatsuya 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.
- [8] Hiraku Abe and Tatsuya Horiguchi, The torus equivariant cohomology rings of Springer varieties, *Topology Appl.* **208** (2016), 143–159.
- [9] Tatsuya Horiguchi, The S^1 -equivariant cohomology rings of $(n - k, k)$ Springer varieties, *Osaka J. Math.* **52** (2015), no. 4, 1051–1062.
- [10] Megumi Harada, Tatsuya Horiguchi, and Mikiya Masuda, The equivariant cohomology rings of Peterson varieties in all Lie types. *Canad. Math. Bull.* **58** (2015), no. 1, 80–90.
- [11] Hiraku Abe, Megumi Harada, Tatsuya Horiguchi, and Mikiya Masuda, The equivariant cohomology rings of regular nilpotent Hessenberg varieties in Lie type A: Research Announcement, *Morfismos* **18** (2014), No. 2, 51–65.

2. Preprints

- [1] Makoto Enokizono, Tatsuya Horiguchi, Takahiro Nagaoka, and Akiyoshi Tsuchiya, An additive basis for the cohomology rings of regular nilpotent Hessenberg varieties, arXiv:1912.11763.
- [2] Makoto Enokizono, Tatsuya Horiguchi, Takahiro Nagaoka, and Akiyoshi Tsuchiya, Uniform bases for ideal arrangements, arXiv:1912.02448.