

PUBLICATION LIST

LEONARDO CONSTANTIN MIHALCEA

- (1) Paolo Aluffi, Leonardo C. Mihalcea, Jörg Schürmann, and Changjian Su, *Positivity of Segre-MacPherson classes*, to appear in *Proceedings of London Math. Soc.* (special issue dedicated to 80th birthday of W. Fulton), available on [arXiv:1902.00762](https://arxiv.org/abs/1902.00762).
- (2) Anders Buch, Sjuvon Chung, Changzheng Li and Leonardo C. Mihalcea, *Euler characteristics in quantum K theory of flag varieties*, *Selecta Math. (N.S.)* **26** (2020), no. 2, Paper No. 29, 11 pp.
- (3) Changzheng Li, Leonardo C. Mihalcea and Ryan Shifler, *Conjecture \mathcal{O} holds for the odd symplectic Grassmannian*, *Bulletin of London Math. Society*, vol. **51**, issue 4, pages 705 – 714, 2019.
- (4) Leonardo C. Mihalcea and Ryan Shifler, *Equivariant Quantum Cohomology of the Odd Symplectic Grassmannian*, *Math. Zeitschrift*, **291** (3-4), pag. 1569-1603, 2019.
- (5) Thomas Lam, Changzheng Li, Leonardo C. Mihalcea and Mark Shimozono, *A conjectural Peterson isomorphism in K-theory*, *J. of Algebra*, 513 (2018), 326 - 343.
[doi:10.1016/j.jalgebra.2018.07.029](https://doi.org/10.1016/j.jalgebra.2018.07.029).
- (6) Liviu Mare and Leonardo C. Mihalcea, *An affine deformation of the quantum cohomology ring of flag manifolds and periodic Toda lattice*, *Proceedings of the London Mathematical Society*, (3) vol. 116 (2018), no. 1, pag. 135 - 181.
- (7) Anders Buch, Pierre-Emmanuel Chaput, Leonardo C. Mihalcea and Nicolas Perrin, *A Chevalley formula for the equivariant quantum K-theory of cominuscule varieties*, to appear in *Algebraic Geometry*, available on [arXiv:1604.07500](https://arxiv.org/abs/1604.07500).
- (8) Anders Buch, Pierre-Emmanuel Chaput, Leonardo C. Mihalcea and Nicolas Perrin, *Projected Gromov-Witten varieties in cominuscule spaces*, *Proc. of American Math. Society*, **146** (2018), no. 9, 3647 - 3660.
- (9) Paolo Aluffi and Leonardo C. Mihalcea, *Chern-Schwartz-MacPherson classes for Schubert cells in flag manifolds*, to appear in *Compositio Math.* **152** (2016), no. 12, 2603 - 2625.
- (10) Trevor Norton and Leonardo C. Mihalcea, *Combinatorial curve neighborhoods for the affine flag manifold of type A_1^1* , to appear in *Involve*, outcome of an undergraduate research project, available at [http://www.math.vt.edu/people/lmihalce/curvenbhdsA11\(finalv\).pdf](http://www.math.vt.edu/people/lmihalce/curvenbhdsA11(finalv).pdf)

PUBLICATION LIST

- (11) Takeshi Ikeda, Leonardo C. Mihalcea and Hiroshi Naruse, *Factorial P- and Q-Schur functions represent equivariant quantum Schubert classes*, Osaka J. Math. **53** (2016), no. 3, 591 - 619.
- (12) Rachel Elliott, Mark E. Lewers and Leonardo C. Mihalcea, *Quantum Schubert polynomials for the G_2 flag manifold*, Involve **9** (2016), no. 3, 437 - 451; (outcome of an undergraduate research project).
- (13) Anders Buch, Pierre-Emmanuel Chaput, Leonardo C. Mihalcea and Nicolas Perrin, *Rational connectedness implies finiteness of quantum K-theory*, Asian J. Math. **20** (2016), no. 1, 117 - 122.
- (14) Leonardo C. Mihalcea, *Binomial determinants and positivity of Chern-Schwartz-MacPherson classes*, The Australasian Journal of Combinatorics **62** (part 2) (June 2015).
- (15) Anders Buch and Leonardo C. Mihalcea, *Curve neighborhoods of Schubert varieties*, J. Differential Geom. **99** (2015), no. 2, 255 - 283.
- (16) Changzheng Li and Leonardo C. Mihalcea, *K-theoretic Gromov-Witten invariants of lines in homogeneous spaces*, Int. Math. Res. Notices 2013, doi: 10.1093/imrn/rnt090.
- (17) Anders Buch, Pierre-Emmanuel Chaput, Leonardo C. Mihalcea and Nicolas Perrin, *Finiteness of cominuscule quantum K-theory*, Annales Sci. de l'École Normale Supérieure, **46**, fascicule 3 (2013), pag. 477- 494.
- (18) Anders Buch and Leonardo C. Mihalcea, *Quantum K-theory of Grassmannians*, Duke Math. Journal **156** (2011), no. 3, 501 - 538.
- (19) Takeshi Ikeda, Leonardo C. Mihalcea, and Hiroshi Naruse, *Double Schubert polynomials for the classical groups*, Advances in Math. **226** (2011), no. 1, 840 - 886.
- (20) Paolo Aluffi and Leonardo C. Mihalcea, *Chern classes of Schubert cells and varieties*, Journal of Alg. Geom. **18** (2009), no. 1, 63 - 100.
- (21) Takeshi Ikeda, Leonardo C. Mihalcea, and Hiroshi Naruse, *Double Schubert polynomials for the classical Lie groups*, 20th Annual International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2008), Discrete Math. Theor. Comput. Sci. Proc., AJ, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2008, pp. 665 - 676.
- (22) Leonardo C. Mihalcea, *Giambelli formulae for the equivariant quantum cohomology of the Grassmannian*, Transactions of AMS **360** (2008), no. 5, 2285 - 2301.
- (23) Leonardo C. Mihalcea, *On equivariant quantum cohomology of homogeneous spaces: Chevalley formulae and algorithms*, Duke Math. J. **140** (2007), no. 2, 321 - 350.

- (24) Leonardo C. Mihalcea, *Equivariant quantum Schubert Calculus*, Adv. in Math. **203** (2006), no. 1, 1 - 33.
- (25) Leonardo C. Mihalcea, *Positivity in equivariant quantum Schubert calculus*, Amer. J. Math. **128** (2006), no. 3, 787 - 803.
- (26) Leonardo C. Mihalcea, *Equivariant quantum cohomology of homogeneous spaces*, Thesis (Ph.D.) University of Michigan. 2005. 120 pp
- (27) Gianni Ciolli and Leonardo C. Mihalcea, *A canonical resolution of the singularities of a triple covering of algebraic surfaces*, PRAGMATIC, 2001 (Catania). Matematiche (Catania) **56** (2001), no. 2, 281 - 296 (2003).

Preprints (available on arXiv)

- (1) Rebecca Goldin, Leonardo C. Mihalcea and Rahul Singh, *Positivity of Peterson Schubert Calculus*, submitted, preprint available on arXiv:2106.10372.
- (2) Wei Gu, Leonardo C. Mihalcea, Eric Sharpe, and Hao Zou, *Quantum K theory of symplectic Grassmannians*, submitted, preprint available on arXiv:2008.04909.
- (3) Leonardo C. Mihalcea and Rahul Singh, *Mather classes and conormal spaces of Schubert varieties in cominuscule spaces*, submitted, preprint available on arXiv:2006.04842.
- (4) Leonardo C. Mihalcea and Changjian Su, with an Appendix joint with David Anderson, *Whittaker functions from motivic Chern classes*, submitted, available on arXiv:1910.14065.
- (5) Paolo Aluffi, Leonardo C. Mihalcea, Jörg Schürmann, and Changjian Su, *Motivic Chern classes of Schubert cells, Hecke algebras, and applications to Casselman's problem*, submitted, available on arXiv:1902.10101.
- (6) Paolo Aluffi, Leonardo C. Mihalcea, Jörg Schürmann, and Changjian Su, *Shadows of characteristic cycles, Verma modules, and positivity of Chern-Schwartz-MacPherson classes of Schubert cells*, submitted, available on arXiv:1709.08697.

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