

PAVLO PYLYAVSKYY

University of Minnesota
Department of Mathematics
206 Church St. SE
Minneapolis, MN 55455.

Phone: 617-272-0624
ppylyavs@umn.edu
sites.google.com/site/pylyavskyy/

Education.

2003-2007 MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA, USA.
Ph.D. in Mathematics, June, 2007.
Thesis advisor: Richard Stanley.

1999-2003 MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA, USA.
B.Sc. in Mathematics, June 2003.

Employment.

2014–now Associate Professor, University of Minnesota.

2010–2014 Assistant Professor, University of Minnesota.

2007–2010 T.H. Hildebrandt Research Assistant Professor, University of Michigan.

Research Interests.

Algebraic combinatorics.

Grants, Awards and Fellowships.

2013-2018 *NSF Career grant DMS-1351590*, National Science foundation.

2013 *Sloan Fellowship*, Sloan Foundation.

2012-2016 *RTG 5 year grant DMS-1148634*, National Science Foundation.

2011-2014 *NSF 3 year grant DMS-1068169*, National Science Foundation.

2008-2011 *NSF 3 year grant DMS-0757165*, National Science Foundation.

2007 *Clay Liftoff Fellowship*, Clay Mathematical Institute.

2005-2006 *Best mentor-mentee team*, SPUR summer program, MIT.

2000 *Putnam Fellow*, 61st William Lowell Putnam Mathematical Competition.

Selected Publications

- (with Pavel Galashin) *Quivers with subadditive labelings: classification and integrability*, preprint, 2016;
arXiv:1606.04878.
- (with Pavel Galashin) *The classification of Zamolodchikov periodic quivers*, preprint, 2016;
arXiv:1603.03942.
- (with Michael Chmutov and Elena Yudovina) *Matrix-ball construction of affine Robinson-Schensted*, preprint, 2015;
arXiv:1504.03448.
- *Zamolodchikov integrability via rings of invariants*, Journal of Integrable Systems, to appear.
- (with Max Glick) *Y-meshes and generalized pentagram maps*, Proceedings of the London Mathematical Society, to appear.
- (with Thomas Lam and Rei Inoue) *Toric networks, geometric R-matrices and generalized discrete Toda lattices*, Communications in Mathematical Physics, to appear.
- (with Thomas Lam and Reiho Sakamoto) *Rigged Configurations and Cylindric Loop Schur Functions*, Annales de L'Institut Henri Poincaré D, to appear.
- (with Rebecca Patrias) *Dual filtered graphs*, preprint, 2014;
arXiv:1410.7683.
- (with Sergey Fomin) *Webs on surfaces, rings of invariants, and clusters*, Proc. Natl. Acad. Sci., **111** (2014), no. 27, 9680–9687
- (with Sergey Fomin) *Tensor diagrams and cluster algebras*, Advances in Mathematics, to appear.
- (with Thomas Lam) *Linear Laurent phenomenon algebras*, International Mathematical Research Notices, to appear.
- (with Thomas Lam) *Laurent phenomenon algebras*, Cambridge Journal of Mathematics, to appear.
- (with Thomas Lam) *Inverse problem in cylindrical electrical networks*, SIAM Journ. Appl. Math., **72** (2012), no. 3, 767–788.
- (with Thomas Lam) *Electrical networks and Lie theory*, Alg. and Numb.Theory, **9**, (2015), no. 6, 1401–1418.
- (with Thomas Lam) *Total positivity in loop groups II: Chevalley generators*, Transform. Groups, March 2013, Volume 18, Issue 1, pp 179–231.
- (with Thomas Lam) *Total positivity in loop groups I: whirls and curls*, Adv. in Math., **230** (2012), no. 3, 1222–1271.

- (with Thomas Lam) *Combinatorial Hopf algebras and K -homology of Grassmannians*, Int. Math. Res. Not., **2007** (2007), rnm 125, 48 pages.
- (with Thomas Lam and Alexander Postnikov) *Schur positivity and Schur log-concavity*, Amer. J. Math., **129** (2007), 1611–1622.