

## Research interests

Number theory, algebraic geometry

## Employment

- **University of Georgia** USA  
*Limited Term Assistant Professor* Spring 2021 –
- **Mathematical Sciences Research Institute** USA  
*Postdoctoral Fellow* Fall 2020

## Education

- **Massachusetts Institute of Technology** USA  
*PhD, advisor Bjorn Poonen* 2015 - 2020
- **Kharkiv, V.N. Karazin National University** Ukraine  
*BSc in Pure Mathematics* 2011 - 2015

## Publications

1. B. Kadets “Sectional monodromy groups of projective curves” – Jour. London Math. Soc., (2) 103 (2021) arXiv
2. S. Hashimoto and B. Kadets “38406501359372282063949 & all that: Monodromy of Fano Problems” – International Mathematics Research Notices, (2020), arXiv
3. B. Kadets “Estimates for the number of rational points on simple abelian varieties over finite fields” – Math. Zeitschrift (2020), arXiv
4. B. Kadets “Large arboreal Galois representations” – Journal of Number Theory, **210** (2020) 416-430, arXiv
5. B. Kadets, E. Karolinsky, A. Stolin, I. Pop “Classification of quantum groups and Belavin-Drinfeld cohomologies for orthogonal and symplectic Lie algebras” – J. Math. Phys, **57**, 051707 (2016), arXiv
6. B. Kadets, E. Karolinsky, A. Stolin, I. Pop “Classification of quantum groups and Belavin-Drinfeld cohomologies” – Communications in Mathematical Physics, **344**, 1, 2016, p. 1-24, arXiv
7. C. Eagle, I. Farah, B. Hart, B. Kadets, V. Kalashnyk, M. Lupini “Fraïssé limits of  $C^*$ -algebras” – J. Symb. Logic, **81**(02), 2016, arXiv
8. B. Kadets, E. Karolinsky, A. Stolin, I. Pop “Quantum groups: from Kulish-Reshetikhin discovery to classification” – Zap. Nauchn. Sem. POMI, **433**, 2015, p.186-196, arXiv

## Preprints

1. B. Kadets, D. Litt “Level structure, arithmetic representations, and noncommutative Siegel linearization”, arXiv
2. P. Dittmann, B. Kadets “Odoni’s conjecture on arboreal Galois representations is false”, arXiv

## Research Talks

- “Improving Weil bounds for abelian varieties”, CMS Summer Meeting, 2021
- “Improve your Weil bounds with this one weird trick”, University of Georgia number theory seminar, 2021
- “Monodromy groups in algebraic geometry”, MSRI Junior seminar, 2020
- “Improving Weil bounds for abelian varieties”, MSRI Definability seminar, 2020
- “38406501359372282063949 & all that: Monodromy of Fano problems”, University of Georgia algebraic geometry seminar, 2020
- “38406501359372282063949 & all that: Monodromy of Fano problems”, Stanford algebraic geometry seminar, 2020
- “Number of points on abelian varieties over finite fields”, University of Washington number theory seminar, 2020
- “Monodromy of hyperplane sections of projective curves”, Joint Mathematics Meeting, Denver, CO, 2020
- “Monodromy of hyperplane sections of projective curves”, AMS Western Sectional Meeting, Riverside, CA, 2019
- “Sectional monodromy groups of projective curves”, Number Theory seminar, UW Madison, 2019
- “Sectional monodromy groups of projective curves”, Algebra seminar, Georgia Tech., 2019

## Other activities

- MSRI Summer School on “Sparsity of Algebraic points”, Teaching Assistant 2021
- ZaZoom (Zannier on Zoom) co-organizer, UGA, Fall 2020
- STAGE (Seminar on Topics in Arithmetic, Geometry, Etc.) co-organizer, MIT, Fall 2019
- Math Research Community “Explicit Methods in Arithmetic Geometry in Characteristic  $p$ ” assistant, 2019
- MIT Friends of the Arts co-organizer, 2018-2019

- STAGE (Seminar on Topics in Arithmetic, Geometry, Etc.) co-organizer, MIT, Fall 2018
- STAGE (Seminar on Topics in Arithmetic, Geometry, Etc.) co-organizer, MIT, Spring 2017
- SPUR (Summer Program in Undergraduate Research) mentor, MIT, 2016
- PRIMES (Program for Research in Mathematics, Engineering and Science for High School Students) mentor, MIT, 2015-2016
- Co-organizer of Kharkiv Undergraduate Math Seminar 2014-2015
- Mentor of a high school olympiad circle, Kharkiv 2011-2015