July 29, 2022 kadets.math@gmail.com bkadets.github.io

#### Research interests

Number theory, algebraic geometry

## **Employment**

University of Georgia

Limited Term Assistant Professor

Mathematical Sciences Research Institute

Postdoctoral Fellow

USA

Spring 2021 -

USA

Fall 2020

### Education

Massachusetts Institute of Technology

PhD, advisor Bjorn Poonen

USA

2015 - 2020

Kharkiv, V.N. Karazin National University

BSc in Pure Mathematics

2011 - 2015

Ukraine

#### Research Publications

- 1. B. Kadets, D. Litt "Level structure, arithmetic representations, and noncommutative Siegel linearization", J. Reine Angew. Math. 788 (2022), arXiv
- 2. P. Dittmann, B. Kadets "Odoni's conjecture on arboreal Galois representations is false", Proc. Amer. Math. Soc. **150** (2022), arXiv
- 3. B. Kadets "Sectional monodromy groups of projective curves" Jour. London Math. Soc. (2) 103 (2021) arXiv
- 4. B. Kadets "Estimates for the number of rational points on simple abelian varieties over finite fields" Math. Zeitschrift 297 (2021), arXiv
- 5. S. Hashimoto and B. Kadets "38406501359372282063949 & all that: Monodromy of Fano Problems" International Mathematics Research Notices no. 5 (2020), arXiv
- 6. B. Kadets "Large arboreal Galois representations" Journal of Number Theory, 210 (2020) 416-430, arXiv
- 7. 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
- 8. 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
- 9. C. Eagle, I. Farah, B. Hart, B. Kadets, V. Kalashnyk, M. Lupini "Fraïssé limits of C\*-algebras" J. Symb. Logic, **81**(02), 2016, arXiv
- 10. 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, I. Vogt "Subspace configurations and low degree points on curves", in preparation
- 2. B. Kadets "Galois specialization to symmetric points and the inverse Galois problem up to  $S_n$ ", arXiv

# Other writing

1. R. Bell, B. Kadets, P. Srinivasan, N. Triantafillou, I. Vogt "Practical Suggestions for Mathematical Writing", Notices of the AMS, 68, 6, (2021)

### Research Talks

- "Low degree points and linear configurations", Oberwolfach workshop "Explicit Methods in Number Theory", 2021
- "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

# Professional activities

- ADDING (Anabelian Days Down in Georgia) workshop organizer, 2021
- MSRI Summer School on "Sparsity of Algebraic points", Teaching Assistant, 2021
- ZaZoom (Zannier on Zoom) seminar 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

- $\bullet\,$  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
- $\bullet$  PRIMES (Program for Research in Mathematics, Engineering and Science for High School Students) mentor, MIT, 2015-2016