Arseniy (Senia) Sheydvasser

Graduate Center at CUNY
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RESEARCH INTERESTS	Analytic Number Theory; Integral Circle/Sphere Packings; Thin Groups; Orders of Quaternion Algebras; Additive Number Theory

APPOINTMENTS   2018 - 2020   Research Associate   Graduate Center at CUNY, New York

EDUCATION

Doctor of Mathematics,   2012 - 2018
Yale University, New Haven, CT

Bachelor of Mathematics, Bachelor of Physics, Magna Cum Laude   2008 - 2012
Bowdoin College, Brunswick, ME

PAPERS

- *Quaternion Orders and Sphere Packings*, **Journal of Number Theory**, accepted
- *Rigidity of Ulam Sets and Sequences* (with J. Hinman, B. Kuca, and A. Schlesinger), **Involve 12(3)** (2019) 521-539
- *The Unreasonable Rigidity of Ulam Sequences* (with J. Hinman, B. Kuca, and A. Schlesinger), **Journal of Number Theory 194** (2019) 409-425
- *Orders Over Algebras with Involution*, **Journal of Number Theory 183** (2017) 249-268
- *A Corrigendum to Unreasonable Slightness.* **The American Mathematical Monthly 123(5)** (2016) 482-85

TALKS

- **Graduate Center**, *Hyperbolic Isometry Groups and Quaternion Algebras.* Apr. 2019
- **Graduate Center**, *Applications of Orders with Involution.* Mar. 2019
- **Bronx Community College**, *Two Trivial Problems and an Impossible One.* Dec. 2018
- **Integers 2018**, *Rigidity in the Ulam sequence.* Oct. 2018
- **New York Logic Model Theory Seminar** (at CUNY), *Rigidity in the Ulam sequence.* Sep. 2018
- **CANT 2018** (at CUNY), *Rigidity in the Ulam sequence.* May. 2018
- **Rutgers University**, *Connections between Integral Sphere Packings and Quaternion Algebras.* May. 2018
- **Dartmouth College**, *Quaternion Algebras and Integral Sphere Packings.* Feb. 2017
- **University of Colorado, Boulder**, *Quaternion Algebras and Integral Sphere Packings.* Oct. 2016

TEACHING	CUNY
	• Spring 2019: Calculus with Analytic Geometry I
	Yale University
	• Spring 2018: Calculus of Functions of One Variable II (flipped classroom)
	• Fall 2017: Cryptography and Computer Security
	• Fall 2016: Calculus of Functions of One Variable I
	• Fall 2015: Multivariable Calculus
	• Spring 2014: Calculus of Functions of One Variable II (flipped classroom)

STUDENT ADVISING EXPERIENCE

Graduate Mentor at SUMRY June-August 2017
Worked with J. Hinman, B. Kuca, and A. Schlesinger on "The Unreasonable Rigidity of Ulam Sets."

Graduate Mentor at SUMRY June-August 2016
Worked with R. Mintzer-Sweeney, A. Schlesinger, and K. Xiu on "Embeddings of Imaginary Quadratic Fields into Rational Quaternion Algebras."

Graduate Mentor at DIMACS REU June-July 2015
Worked with L. Kenigsberg on "Cymatics-Chlandi Plates." (Kenigsberg won a Goldwater scholarship for this work)

PROGRAMMING LANGUAGES Python, Sage, Java, Mathematica

BROADER IMPACTS Top Writer at Quora (https://www.quora.com/profile/Senia-Sheydvasser), writing primarily about mathematics.