

Scott Schmieding

CONTACT INFORMATION	Northwestern University Department of Mathematics 2033 Sheridan Road - Lunt Hall Evanston, IL 60201 USA	<code>schmiedi@math.northwestern.edu</code>
RESEARCH INTERESTS	Symbolic dynamics and algebraic k-theory, topological dynamics, ergodic theory, aperiodic tilings	
EDUCATION	University of Maryland Ph.D. in Mathematics, May 2016 <ul style="list-style-type: none">• Dissertation Topic: Strong shift equivalence, algebraic K-theory, isolating zero-dimensional dynamics on manifolds• Advisor: Mike Boyle Montana State University B.S. in Mathematics, May 2008 M.S. in Mathematics, May 2010	
EMPLOYMENT	2016 - 2019 Northwestern University, RTG Postdoctoral Fellow	
PUBLICATIONS	Mike Boyle, Scott Schmieding, <i>Dynamics of isolated invariant sets</i> , in preparation. Scott Schmieding, Rodrigo Treviño, <i>Random substitution tilings and deviation phenomena</i> , in preparation. Scott Schmieding, Kitty Yang, <i>The mapping class group of a minimal subshift</i> , preprint, arXiv:1810.08847. Scott Schmieding, <i>Automorphisms of the shift: Lyapunov Exponents, entropy, and the dimension representation</i> , to appear, Ergodic Theory and Dynamical Systems, https://arxiv.org/abs/1803.04060 . Scott Schmieding, Rodrigo Treviño, <i>Traces of random operators associated with self-affine Delone sets and Shubin's formula</i> , Annales Henri Poincaré, 19 (2018), no. 9, 2575–2597. Scott Schmieding, Rodrigo Treviño, <i>Self affine Delone sets and deviation phenomena</i> , Communications in Mathematical Physics, 357(3), (2018) 1071–1112. Mike Boyle, Scott Schmieding, <i>Strong shift equivalence and algebraic K-theory</i> , Journal für die reine und angewandte Mathematik (Crelles Journal), December 2016. Mike Boyle, Scott Schmieding, <i>Finite group extensions of shifts of finite type: K-theory, Parry and Livšic</i> , Ergodic Theory and Dynamical Systems 37 (2017), no. 4, 1026–1059. Mike Boyle, Scott Schmieding, <i>Strong shift equivalence and the generalized Spectral Conjecture for nonnegative matrices</i> , Linear Algebra and its Applications, Volume 498, (2016) 231–243.	

Marcy Barge, Johannes Kellendonk, Scott Schmieding, *Maximal equicontinuous factors and cohomology for tiling spaces*, Fund. Math. **218** (2012), 243–267.

CONFERENCE
TALKS

Automorphisms of the shift: Lyapunov exponents and the dimension representation, Midwest Dynamical Systems Conference (November 2017).

Isolating zero-dimensional dynamics on manifolds, Special Session on Zero Dimensional Dynamics (October 2016).

Gähler and Anderson-Putnam Complexes, Mathematisches Forschungsinstitut Oberwolfach (October 2015).

Dynamics of isolated invariants sets, Rocky Mountain Dynamical Systems Conference, Provo, Utah (June 2015).

Strong shift equivalence and algebraic K-theory, Special Session on Number Theory in Ergodic Theory and Dynamical Systems, Georgetown University (March 2015).

Strong shift equivalence of matrices over a ring, Semi-annual Workshop in Dynamical Systems and Related Topics, Penn State (October 2013).

Equivalences on endomorphisms and algebraic K-theory, Catholic University of America (October 2013).

Isolating dynamics in manifolds, Carolina Dynamics, University of North Carolina (April 2013).

Maximal equicontinuous factors and cohomology for tiling spaces, Special Session on Tilings, Substitutions, and Bratteli-Vershik Transformation, George Washington University (March 2012).

CONFERENCE
CO-ORGANIZATION

2017 - AMS Special Session on Dynamical Systems: Smooth, Symbolic, and Measurable.

PROFESSIONAL
ACTIVITIES

Oct. 2015 - Participant in Oberwolfach Arbeitsgemeinschaft on Mathematical Quasicrystals

June 2017 - Participant in Mathematical Research Communities on Dynamical systems: Smooth, Symbolic, and Measurable.

TEACHING AND
GRADING

Northwestern University

2016-present

Instructor:

Math 212, 213: Calculus 1,2 - Fall 2018/Winter 2019

Math 224: Integral Calculus - Fall 2016

Math 230: Diff. Multivari. Calculus - Spring 2017

Math 240: Linear Algebra - Fall 2017

Math 250: Diff. Equations - Fall 2017, Spring 2018

Math 513: Topics in Symbolic Dynamics - Winter 2019

University of Maryland

2010-2016

Instructor: Precalculus, Elementary Calculus I, Calculus I

Teaching Assistant: Calculus I, II, III, Linear Algebra
Grader: Adv. Calc. 1, Topology

Montana State University

2008-2010

Instructor: Precalc., Calc. 1

HONORS AND AWARDS 2013 Monroe-Martin Graduate Student Award winning spotlight talk

EXTENDED TRAVEL Winter 2017 University of Copenhagen, Copenhagen, Denmark