

Kevin Childers | Curriculum Vitae

childers@math.utah.edu | 801-413-6396 | math.utah.edu/~childers

Citizenship

American

Education

- Ph.D. Mathematics** - University of Utah, Salt Lake City, UT 2015 - present
Advised by Stefan Patrikis
- M.S. Mathematics** - Brigham Young University, Provo, UT 2014 - 2015
Advised by Darrin Doud
- B.S. Mathematics** - Brigham Young University, Provo, UT 2009 - 2013
Magna Cum Laude

Publications

Potential Automorphy and E_7 , in preparation

Galois deformation spaces with a sparsity of automorphic points, in preparation

Octahedral Extensions and Proofs of Two Conjectures of Wong, BYU M.S. Thesis (2015)

Joint with Darrin Doud: *Octahedral extensions of the rationals with a common cubic subfield*. J. Number Theory 167 (2016), 141-146. MR 3504039

Joint with Darrin Doud: *Proof of a conjecture of Wong concerning octahedral Galois representations of prime power conductor*, J. Number Theory 154 (2015), 101–104. MR 3339567

Awards

- ATG-RTG Research Fellowship**, NSF grant DMS-1246989 2015 - 2016, 2018
- Orson Pratt Award**, BYU 2013

Selected Talks Given

Classifying Pythagorean triples, Utah Undergraduate Colloquium, Salt Lake City, UT, September 2019

Etale homotopy, Utah Algebraic Geometry Student Seminar, Salt Lake City, UT, November 2017

Factoring primes, Utah Graduate Student Colloquium, Salt Lake City, UT, October 2016

S_4 -extensions with a common cubic subfield, Workshop on Automorphic Forms and Related Topics, Ann Arbor, MI, March 2015

Cubic subfields of S_4 -extensions, BYU Spring Research Conference, Provo, UT, March 2015

Reducible Galois representations attached to the homology of subgroups of $GL(2, \mathbf{Z})$, BYU Spring Research Conference, Provo, UT, March 2014

Targeted Hunter searches for degree 6 polynomials ramified at a single prime, BYU Spring Research Conference, Provo, UT, March 2013

Weakly modular forms of weight 16, BYU Spring Research Conference, Provo, UT, March 2010

Courses Taught

Foundations of Analysis	Summer 2019
College Algebra	Spring 2019
Calculus 2	Winter 2019
Business Calculus	Winter 2019
Calculus 2	Fall 2018
Business Calculus	Fall 2018
Trigonometry (online)	Fall 2018
College Algebra	Spring 2018
Calculus 2	Winter 2018
Business Calculus	Winter 2018
Calculus 2	Fall 2017
Trigonometry (online)	Fall 2017
Trigonometry	Summer 2017
College Algebra	Spring 2017
Calculus 2	Winter 2017
College Algebra	Spring 2016
Calculus of Several Variables	Spring 2015
Business Algebra	Winter 2015
Calculus 1	Summer 2014

Conferences Attended

Arizona Winter School 2019: Topology and Arithmetic, Tucson, AZ, March 2019

Workshop on Galois Representations, Heidelberg Germany, July 2018

Arizona Winter School 2018: Iwasawa Theory, Tucson, AZ, March 2018

Arizona Winter School 2017: Perfectoid Spaces, Tucson, AZ, March 2017

Workshop on Automorphic Forms and Related Topics, Ann Arbor, MI, March 2015

Memberships

American Mathematical Society