

- Ramification in iterated towers for rational functions* [**Hajir**]
 Manuscripta Mathematica **137** (2012), no. 3-4, 273-286.
- 2010 *Points of small order on three-dimensional abelian varieties* [appendix by **Zarhin**]
 Journal of Algebra **324** (2010), 565-577.
- 2009 *A computational approach to the 2-torsion structure of abelian threefolds.*
 Mathematics of Computation **78** (2009), 1825-1836.
- Algebraic properties of a family of Jacobi polynomials* [**Hajir, Sell**]
 Journal de Théorie des Nombres de Bordeaux **21** (2009), no. 1, 71-82.
- 2007 *Local-global properties of torsion points on three-dimensional abelian varieties.*
 Journal of Algebra **311** (2007), no. 2, 736-774.

Outreach

WAMC Academic Minute
<http://academicminute.org/2015/09/john-cullinan-bard-college-voting-and-math/> (2015)

Signed Reviews

AMS Math Reviews (48 papers, 1 book), MAA Reviews (3 books)

Journal and Grant Refereeing

Finite Fields and Applications, American Mathematical Monthly, New York Journal of Mathematics, Publicationes Mathematicae Debrecen, Contemporary Mathematics, Journal of Number Theory, IdEx Bordeaux International Post-Doctoral Program (2015, 2016), Iranian Journal of Mathematical Sciences and Informatics

Conferences/Sessions Organized

Arithmetic Dynamics and Galois Theory, AMS Spring Sectional Meeting, Boston College (2013)
 MAA PrEP: *Algebraic Number Theory* (w/ A. Pacelli), Williams College (2010)
Algebraic Number Theory, AMS Spring Sectional Meeting, Worcester Polytechnic Institute (2009)

Recent Invited Talks

Arithmetic Properties of Jacobians of Curves Defined by the Generalized Laguerre Polynomials
 AMS/MAA Joint Meetings, San Diego (2018)

Divisibility Properties of Abelian Varieties
 Philadelphia Area Number Theory Seminar (2017)

Legendre Polynomials: From Mathematical Physics to Number Theory
 Williams College Mathematics Seminar (2016)

Some ℓ -adic representations attached to low-dimensional abelian varieties
 Number Theory Seminar, CU Boulder (2015)

A Borda count for partially ordered ballots.
 AMS/MAA Joint Meetings, San Antonio (2015)

Algebraic properties of certain lifts of supersingular polynomials
 AMS Sectional Meeting, UNC Greensboro (2014)

Arithmetic properties of the Legendre polynomials.
 Maine/Québec Number Theory Conference, University of Maine (2013)

Major Teaching Initiatives at Bard College

Designed and taught the *Mathematics and Politics* course for nonmajors since 2008. Redesigning the course with support from the Howard Hughes Medical Institute (HHMI) grant in 2014.

Designed an applied PDE course with labs focusing on numerical techniques (2017).

Designed and taught *Uncertainty and Variation* in the inaugural Modern Literacy program (2015-17).

Directed a self-study of the Mathematics Department in 2016-17 resulting in an overhaul of the sophomore-level course offerings and graduation requirements.

21 Senior Projects Advised at Bard College 2006 – present

Post-Tenure Service

Mathematics Department Chair 2014 – 2017

Hiring Committee for Tenure-Track Position in Mathematics 2015 – 2016

Hiring Committee for Tenure-Track Position in Mathematics (Chair) 2014 – 2015

First Year Seminar Symposium Mentor 2014 – 2015

AAUP Executive Committee 2014

Pre-Tenure Divisional Evaluator for Bruce Robertson 2014

Fellowships and Awards Committee 2014 – 2015