Florian Enescu

EDUCATION

- Ph.D. in Mathematics (August 2001), **University of Michigan at Ann Arbor (thesis advisor: Professor Melvin Hochster)**
- Master of Science (August 1999), **University of Michigan at Ann Arbor**
- Diploma (B.Sc.) in Mathematics, (June 1996), **University of Bucharest, Romania**

POSITIONS

- (July 2009 – present) Associate Professor, **Georgia State University**
- (August 2004 – June 2009) Assistant Professor, **Georgia State University**
- (August 2001 - August 2004) Scott Assistant Professor, **University of Utah**
- (Fall 2002) Postdoctoral Research Fellow, **Mathematical Sciences Research Institute, Berkeley, California**
- (1996 - 1999) Graduate Student Instructor, **University of Michigan at Ann Arbor**
- (1999 - 2000) Research Assistant, **University of Michigan at Ann Arbor**
- (1995 – present) **Institute of Mathematics of the Romanian Academy, Romania**

RESEARCH INTERESTS

- Commutative Algebra, Algebraic Geometry

GRANTS

- (02/16/2010-02/15/2012) National Security Agency, Young Investigators Grant (P.I.) - **Hilbert-Kunz multiplicities and local cohomology questions in positive characteristic**
- (09/24/2010-09/26/2010) (co-P.I.), Georgia State University Research Foundation- **Conference Grant for Commutative Algebra Meetings in the Southeast**, **Georgia State University**
- (10/29/2008-10/28/2010) National Security Agency/University of South Carolina Subcontract (P.I.) **- GSU-USC Commutative Algebra Seminar**
- (01/01/2007-12/31/2009) National Security Agency, Young Investigators Grant (P.I.) - **Special chapters in the theory of rings of positive characteristic**
- (08/01/2005-07/31/2006, with a no-cost extension until 04/30/2007) NSF Grant CCF-0515010 (P.I.) **- Collaborative research: a new theoretical and algorithmic framework for RTL datapath verification using polynomial algebra over finite rings**
- (2005) Research Initiation Grant, **Georgia State University**
- (1999, 2000) Rackham Travel Grant, **University of Michigan at Ann Arbor**

AWARDS, HONORS

- (2004) Outstanding Instructor Award, **University of Utah**
- (Fall 2002) Postdoctoral Research Fellow, **Mathematical Sciences Research Institute, Berkeley, California**
- (Fall 2000 – Summer 2001) Rackham Predoctoral Fellowship, **University of Michigan at Ann Arbor**
- (1991 - 1996) National Merit Fellowship, **University of Bucharest, Romania**

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Ph.D. THESIS

A study of F-rationality and F-injectivity, University of Michigan at Ann Arbor, August 2001

INVITED TALKS

- (November 2010), A finiteness condition on local cohomology modules, Commutative Algebra Seminar, University of Utah.
- (April 2010), The lower semicontinuity of the Frobenius splitting numbers, Western Section, AMS meeting, Session on Trends in commutative algebra, University of New Mexico.
- (November 2009), Multiplicity in algebra and geometry, Colloquium, University of Mississippi
- (November 2009), Local cohomology, F-purity and antinilpotency, Southeastern AMS meeting, Florida Atlantic University
- (October 2009), Hilbert-Kunz multiplicities: open questions and applications, Algebra Seminar (joint with Algebraic Geometry Seminar), University of Georgia.
- (September 2009), The lower semicontinuity of Frobenius splitting numbers, GSU-USC Commutative Algebra Regional Meeting, South Carolina.
- (April 2009), Finite dimensional vector space with Frobenius action, GSU-USC Commutative Algebra Regional Meeting, South Carolina
- (March 2009), Antinilpotent modules, Commutative Algebra Seminar, University of Illinois at Urbana-Champaign
- (August 2008), Hilbert-Kunz multiplicities, Commutative Algebra and Its Interactions Conference, University of Michigan.
- (April 2008), Local Cohomology and F-stability, Commutative Algebra Seminar, University of Minnesota.
- (March 2008), The Frobenius Structure of Local Cohomology, Algebraic Geometry Seminar, University of Barcelona, Spain.
- (January 2008), On the behavior of F-injectivity under flat base change, GSU-USC Joint Commutative Algebra Seminar, University of South Carolina.
- (November 2007), A question on F-injectivity with implications for F-stability, GSU-USC Joint Commutative Algebra Seminar, University of South Carolina
- (November 2007), A question on F-injectivity with implications for F-stability, GSU-USC Joint Commutative Algebra Seminar, University of South Carolina
- (July 2007), Local cohomology and F-stability, International Conference on Homological and Combinatorial aspects in Commutative Algebra, Busteni, Romania.

- (March 2007), Frobenius depth, GSU-USC Commutative Algebra Seminar, University of South Carolina.
- (March 2007), Hilbert-Kunz multiplicities, Colloquium, North Dakota State University.
- (November 2006), Lower bounds for Hilbert-Kunz multiplicities, Algebra Seminar, University of South Carolina.
- (October 2006), Lower bounds for Hilbert-Kunz multiplicities, AMS Sectional Meeting, Salt Lake City, Utah.
- (May 2006), On almost regular sequences, Homological Conjectures in Commutative Algebra Snowbird, Utah.
- (April 2006), Almost regular sequences, AMS Sectional Meeting, San Francisco State University, San Francisco.
- (March 2006), Local cohomology and Frobenius depth, AMS Sectional Meeting, Florida International University, Miami.
- (February 2006), Positive characteristic techniques in algebra and geometry, Colloquium, Miami University at Ohio
- (October 2005), Local cohomology and F-stable primes, AMS Sectional Meeting, Bard College.
- (October 2005), Local cohomology and F-stable primes, Commutative Algebra Seminar, University of Michigan.
- (August 2005), Local cohomology and the Cohen-Macaulay property, supporting talk (prepared with Sara Faridi), the Minnowbrook workshop on Commutative Algebra.
- (April 2005), Ideals and cones, Algebra Seminar, Emory University.
- (October 2004), The Hilbert-Kunz multiplicity and complete intersections, Algebra Seminar, University of South Carolina.
- (May 2004), The structure of F-pure rings, The Sixth AMS-SSM Joint Meeting, Houston
- (March 2004), Rings with small Hilbert-Kunz multiplicities, University of Missouri
- (March 2004), A new perspective on classical problems in algebra, Colloquium, Kent State University
- (February 2004), A new perspective on classical problems in algebra and geometry, Colloquium, Georgia State University
- (February 2004), Powers of ideals in polynomial rings, Graduate Colloquium, University of Utah
- (March 2003) F-pure rings and the splitting dimension, University of Michigan
- (November 2002) Parameter ideals, multiplicities and tight closure theory, University of California at Riverside
- (October 2002) A few characteristic p concepts in commutative algebra, MSRI, Berkeley, California
- (September 2002) Aspects of the tight closure theory of parameter ideals, MSRI, Berkeley, California
- (March 2002) An incursion into commutative algebra on the path of a simple example, Graduate Student Colloquium, University of Utah
- (January 2002) F-injective rings and F-stable primes, AMS meeting, San Diego, California
- (April 2001) Rings with small Hilbert-Kunz multiplicities, Algebra Weekend, University of Missouri, Columbia

- (March 2001) Test ideals and flat base change problems in tight closure theory, AMS meeting, University of Kansas
- (March 2001) Frobenius structure of local cohomology, University of Utah
- (September 2000) Applications of pseudocanonical covers to tight closure theory, AMS meeting, Toronto
- (March 2000) F-injective rings and F-stable primes, AMS meeting, South Bend, Indiana
- (September 1999) F-rational rings and flat base change, AMS meeting, Salt Lake City

Mentoring of graduate students:

- Current Ph. D. advisor for Sara Malec. Current masters thesis advisor for Anton Preslicka, Qamar Ahmad.

- Masters thesis advisor for Muslim Baig at Georgia State University. Thesis: Primary decomposition and secondary representation of modules over a commutative ring. Defended Spring 2009.

- Masters thesis advisor for Sara Malec at Georgia State University. Thesis: Noetherian filtrations and intersection algebras. Defended Summer 2008

- Outside Committee Member for the Ph.D. dissertation of Namrata Shekhar, Department of Electrical Engineering at University of Utah, August 2007 (the work generated several joint papers)

- Masters thesis advisor for M Brandon Meredith at Georgia State University. Thesis: Polynomial functions over finite rings of integers. Defended Summer 2007 (the work generated several joint papers)

- Masters thesis advisor for Christopher Zagrodny at Georgia State University. Thesis: Algebraic concepts in the study of graphs and simplicial complexes. Defended Summer 2006.

MATHEMATICAL COMMUNITY SERVICE

- (2001 – present) Referee for various mathematical journals (*Communications in Algebra, Journal of Algebra, Proceedings of the AMS, Mathematics of Computation, Journal of Symbolic Computation, Acta Mathematica Universitatis Comenianae, International Journal of Mathematics and Mathematical Sciences, Algebra and Number Theory, Mathematical Research Letters, Transactions of the AMS, Compositio, Journal of Pure and Applied Algebra*)

- (2001 – present) Reviewer for Mathematical Reviews, Zentralblatt fur Mathematik
- (2002 – 2004) Co-organizer of the Commutative Algebra Seminar, University of Utah

• (1998 – 2001) Organizer of the Student Commutative Algebra / Algebraic Geometry Seminar, University of Michigan at Ann Arbor

CONFERENCE ORGANIZER

• Co-organizer (with Yongwei Yao) of the meetings "Commutative Algebra in the Southeast" at Georgia State University. A national meetings was held between September 24-26 2010, and a regional meeting between March 20-21 2010.

• (May 17-May 22 2010) Co-organizer (together with M. Blickle, M. Brion, S. Kumar. M. Mustață, K. Schwede) of the conference "Frobenius splittings in algebraic geoemtry, commutative algebra and representation theory" held at the University of Michigan.

• Co-organizer (together with Sandra Spiroff, March 27-29 2009) of the Special Session "Local and Homological Methods in Commutative Algebra" at the AMS 2009 Spring Central Sectional Meeting to be held at the University of Illinois at Urbana-Champaign

• Co-organizer (together with Yongwei Yao, Oct 20 2006, March 17-18 2007, Sept 16 2007, April 25-27 2008, September 13-14 2009) of the GSU-USC Commutative Algebra Meeting, held at GSU, Atlanta. Two meetings are held in Atlanta every academic year: one regional and one national.

• (March 3-4, 2007) Co-organizer (together with A. Kustin, A. Vraciu) of the Special Session Commutative Algebra and Algebraic Geometry, AMS South-East Section, Davidson College.

• (October 16-17, 2004) Co-organizer (together with A. Vraciu) of the Special Session Local and homological algebra, AMS South-East Section, Nashville, Tennessee

• (June 2004) Co-organizer (together with P.C. Roberts) of the mini-course "Fundamental Problems in Commutative Algebra", with the participation of graduate students nationwide and leading experts in the field, at the University of Utah. I have also given five one hour lectures on Local cohomology, local duality and basic notions of tight closure theory at this mini-course.

• (March 13, 2002) American Mathematical Society Meeting, Special Session on Commutative Algebra, Ann Arbor, Michigan (together with A. K. Singh and K. E. Smith)

• (2002 – 2004) Co-organizer of the Commutative Algebra Seminar, University of Utah

• (1998 – 2001) Organizer of the Student Commutative Algebra / Algebraic Geometry Seminar, University of Michigan at Ann Arbor

MEMBERSHIP TO PROFESSIONAL ORGANIZATIONS

• Member of the American Mathematical Society