

# ELENA PAVELESCU

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## Research Interests

Low dimensional topology  
Contact geometry

## Academic Degrees

University of Pennsylvania, Philadelphia, Ph.D. in Mathematics May 2008  
Thesis: Braids and Open Book Decompositions  
Thesis advisor: Dr. John Etnyre  
University of Bucharest, Romania, B.A. in Mathematics June 2003

## Professional Positions Held

G.C. Evans Instructor July 2008 - present  
Rice University - MS 136  
6100 Main Street, Houston, 77005 TX  
  
Teaching Assistant August 2003 - May 2008  
University of Pennsylvania -Mathematics  
209 S 33rd Street, Philadelphia, 19104 PA

## Awards and Fellowships

*NSF ADVANCE Departmental Grant*, Rice University, 2010-2011  
*AWM-NSF Travel Grant for Conference Travel*, Spring 2009  
*2008 Deans Award for Distinguished Teaching by Graduate Students*, University of Pennsylvania, 2008  
*Benjamin Franklin Fellowship*, University of Pennsylvania, 2003-04, 2006-07  
*Moez Alimohamed Graduate Student Teaching Award* for the 2005-06 academic year  
*Good Teaching Award* for Math 240 ( Calculus III ), University of Pennsylvania, Fall 2005  
*Good Teaching Award* for Math 114 ( Calculus II ), University of Pennsylvania, Spring 2005

## Publications and Preprints

K. Kawamuro, E. Pavelescu *The Self-Linking Number in Annulus and Pants Open Book Decompositions*, Alg.Geom.Top, **11**(2011), no.1, 553-585  
E. Pavelescu *Braiding Knots in Contact 3-Manifolds*, [arxiv.org/abs/0902.3715](http://arxiv.org/abs/0902.3715)

### Invited Talks

*On Legendrian Graphs*, AMS Joint Meetings, New Orleans, LA, January 5-9 2011

*The Self-linking Number in Annulus and Pants Open Book Decompositions*, Tulane University, New Orleans, April 2010

*The Self-linking Number in Annulus and Pants Open Book Decompositions*, University of Southern California, Los Angeles, November 30 2009

*The Self-linking Number in Annulus and Pants Open Book Decompositions*, Connections for Women: Symplectic and Contact Geometry and Topology, MSRI, August 4-5 2009

*The Self-linking Number in Annulus Open Book Decompositions*, AMS 2009 Spring Southeastern Sectional Meeting, NCSU, Raleigh, NC, April 4-5 2009

*Braids and Open Book Decompositions*, Topology Seminar, Rice University, September 2008

*Braids and Open Book Decompositions*, AMS 2008 Spring Southeastern Meeting, Baton Rouge, LA, March 28-30, 2008

### Other Talks and Presentations

*Contact structures on 3-manifolds are deformations of foliations-after J.Etnyre*, Topology Working Seminar, Rice University, October 2008

*On the Transversal Simplicity of the Unknot*, PACT Seminar, Bryn Mawr College, November 2007

*On the Transversal Simplicity of the Unknot*, Graduate Student Geometry - Topology Seminar, University of Pennsylvania, October 2007

*The Kauffman Bound on the Bennequin Number - after Rutherford*, Geometry-Topology Reading Seminar, Georgia Institute of Technology, December 2006 (2 talks)

*From Taut to Tight - Foliations into Contact Structures*, Graduate Student Geometry - Topology Seminar, University of Pennsylvania, August 2006 (1st part of a joint talk)

*The Kauffman Bound on the Bennequin Number - after Rutherford*, PACT Seminar, Bryn Mawr College, April 2006

*Polynomial Knot Invariants*, Graduate Student General Seminar, University of Pennsylvania, February 2006

*The Topology of Symplectic Manifolds - after Gompf*, Graduate Student Geometry - Topology Seminar, University of Pennsylvania, March 2005 (2 talks)

*Legendrian Links of Topological Unknots*, Graduate Student Geometry - Topology Seminar, University of Pennsylvania, November 2005 (2 talks)

*On a Theorem of Jordan*, First Year Graduate Student Seminar, University of Pennsylvania, February

2004

*Introduction to K-Theory*, Graduate Student Algebra Seminar, University of Pennsylvania, October 2003

### Conferences and Workshops Attended

*AMS Joint Meetings*, New Orleans, LA, January 5-9, 2011

*Connections for Women: Homology Theories of Knots and Links*, MSRI, January 21-22, 2010

*Connections for Women: Symplectic and Contact Geometry and Topology*, MSRI, August 4-5 2009

*Georgia International Topology Conference*, University of Georgia, Athens, GA, May 18-29, 2009

*AMS 2009 Spring Southeastern Sectional Meeting*, NCSU, Raleigh, NC, April 4-5 2009

*AMS 2008 Spring Southeastern Meeting*, Baton Rouge, LA, March 28-30, 2008

*Joint Mathematical Meetings*, San Diego, CA, January 6-9, 2008

*Georgia Topology Conference*, University of Georgia, Athens, GA, May 14-18, 2007

*PCMI Summer School on Low Dimensional Topology*, Park City, UT, June-July 2006

*Symplectic Field Theory Conference*, Bryn Mawr College, Bryn Mawr, PA, March 2006

*Geometry Festival*, University of Pennsylvania, Philadelphia, PA, April 2006

### Teaching Experience

#### Rice University

*Instructor*, Math 370 (Calculus on Manifolds), Spring 2011

Math 102 (Single Variable Calculus II), Spring 2009, Spring 2010 (with WebAssign),  
Fall 2010 (with WebAssign)

Math 355 (Linear Algebra), Fall 2009, Fall 2010

Math 211 (Differential Equations), Summer 2010

Math 101 (Single Variable Calculus I), Fall 2009 (with WebAssign)

Math 366 (Geometry), Spring 2009

Math 111 (The Fundamental Theorem of Calculus), Fall 2008

#### University of Pennsylvania

*Teaching Assistant*, 2003-2008: Math 114 (Calculus II), Math 170 (Ideas in Mathematics), Math 240 (Calculus III), Math 104 (Calculus I), Math 203 (Proving Things : Algebra)

Coordinator of *Calculus Reviews*, *Math & Maple Centers* and *On-line Help* sessions, Fall 2004-2008

*Grader* for Math 350 (Introduction to Number Theory), Fall 2005

*Instructor* for Math 104 (Calculus I), Summer 2005

## Service

Co-organizer of the *Mathematics Colloquium*, Rice University, 2009-2011

Presenter for the *Rice University Mathematics Leadership Institute*, Houston, June 2010

Coordinator of the *Teaching Seminar for Graduate Students*, Rice University, 2008-2009

Presenter for the *Sally Ride Science Festival*, Rice University, October 2008

Master TA in the Department of Mathematics *TA Training Program*, University of Pennsylvania, 2005-2008

## References

Tim Cochran, Professor, Rice University

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*Phone*: 713-348-5265

John Etnyre, Professor, Georgia Institute of Technology

*E-mail*: etnyre@math.gatech.edu

*Phone*: 404-385-6760

Shelly Harvey, Associate Professor, Rice University

*E-mail*: shelly@rice.edu

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Bob Hardt, Professor, Rice University

*E-mail*: hardt@math.rice.edu

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