

CURRICULUM VITAE

Steven Levandosky

CONTACT INFORMATION

Department of Mathematics and Computer Science
College of the Holy Cross
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EDUCATION

Brown University, Providence, RI
Ph.D., Mathematics, 1997
Advisor: Walter Strauss
Dissertation: *Stability and Asymptotic Behavior of Higher-Order Nonlinear Waves*
College of the Holy Cross, Worcester, MA
B.A., Mathematics, 1992
Summa Cum Laude

ACADEMIC APPOINTMENTS

College of the Holy Cross, Associate Professor, September 2010 - present
College of the Holy Cross, Assistant Professor, September 2004 - August 2010
College of the Holy Cross, Visiting Assistant Professor, September 2003 - August 2004
Stanford University, Lecturer, September 1999 - August 2003
The University of Texas at Austin, Instructor, August 1997 - July 1999
Brown University, Teaching Fellow/Teaching Assistant, 1993-1997

COURSES TAUGHT AT HOLY CROSS

MATH 110: Topics in Mathematics, Data Analysis
MATH 125: Calculus for the Social Sciences 1
MATH 126: Calculus for the Social Sciences 2
MATH 131: Calculus for the Physical and Life Sciences 1
MATH 132: Calculus for the Physical and Life Sciences 2
MATH 135: Calculus 1
MATH 136: Calculus 2
MATH 241: Multivariable Calculus
MATH 242: Principles of Analysis
MATH 304: Ordinary Differential Equations
MATH 305: Complex Analysis
MATH 361: Real Analysis 1
MATH 362: Real Analysis 2
MATH 371: Numerical Analysis
MATH 373: Partial Differential Equations

MATH 375: Probability Theory

ADDITIONAL TEACHING ACTIVITIES

MATH 200: Independent Study, Amy Lepley '13, Data Analysis, Spring 2013

MATH 400: Directed Reading, Gopal Yalla '15, Advanced ODEs, Spring 2014

MATH 400: Directed Reading, Gopal Yalla '15, Functional Analysis, Fall 2014

MATH 400: Directed Reading, Tim Arnold '16, Hilbert Spaces, Spring 2015

MATH 400: Directed Reading, Woosub Shin '15, Measure Theory, Spring 2015

MATH 496: Honors Thesis, Christopher Schaller '13, Stochastic Differential Equations, Spring 2013

MATH 496: Honors Thesis, Kevin Cotter '14, Numerical Approximations for Solitary Waves of the Korteweg-de Vries Equation, Spring 2014

MATH 496: Honors Thesis, Alison Wilkman '14, Solitary Wave Solutions to the Fifth-Order KdV Equation, Spring 2014

College and Departmental Service

- Math/CS Department Hiring Committee Chair. 2017–2018
- Math/CS Department Chair. 2015–2016, 2016–2017, 2017–2018
- Clare Boothe Luce Scholarship Selection Committee. Spring 2016, Spring 2017, Spring 2018
- Department Representative at Admissions Open House. Spring 2016, Spring 2016, Spring 2018
- Calculus Workshop Director. 2014–2015
- Summer Science Research Selection Committee. Spring 2015
- Faculty Mentor Program. 2013–2014, 2014–2015
- Math/CS Department Faculty Seminar. 2013–2014, 2014–2015
- Faculty Compensation Committee. 2012–2013. 2013–2014 (co-chair), 2014–2015 (co-chair)
- Math/CS Department, GRE Preparation Course. Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014, Fall 2016 Fall 2017
- Holy Cross Triathlon Club, Faculty Advisor. 2013–2014, 2014–2015, 2015–2016
- Math/CS Department, Professional Societies Representative. Spring 2010
- Math/CS Department, Professional Societies Representative. Fall 2009
- Math/CS Department, Colloquium. 2008–2009, 2009–2010
- Math/CS Department, Putnam Competition. Fall 2008, Fall 2011, Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017

- Academic Affairs Council. 2007–2008, 2008–2009
- Math/CS Department, Library Liaison, 2004–2006
- Math/CS Club Advisor, 2005–2006, 2007–2008, 2008–2009, 2011–2012, 2012–2013
- Avon Scholarship Committee, Spring 2005
- Gateways Advising, Summer 2005, Summer 2008
- Writing Letters of Recommendation, letters for 10 people during 2017–2018

PUBLICATIONS

1. Solitary waves of a coupled KdV system with a weak rotation (with Amin Esfahani), *Journal of Differential Equations*, In Press
2. Stability of solitary waves of the Kadomtsev-Petviashvili equation with weak rotation (with Amin Esfahani), *SIAM Journal on Mathematical Analysis*, **49** (2017), no. 6, 5096-5133
3. Solitary Waves of the Generalized Rotation-Generalized Benjamin-Ono Equation (with Amin Esfahani), *Discrete and Continuous Dynamical Systems, Series A*, **33** (2013), no. 2, 663-700.
4. On the Stability of Solitary Waves of the Generalized Ostrovsky Equation, *Analysis and Mathematical Physics*, **2** (2012), no. 4, 407-437.
5. Stability of Solitary Waves for the Generalized Higher-Order Boussinesq Equation (with Amin Esfahani), *Journal of Dynamics and Differential Equations*, **24** (2012), no. 2, 391-425.
6. Stability of Solitary Waves of a Fifth-Order Water Wave Model, *Physica D*, **227** (2007), no. 2, 162-172.
7. Stability and Weak Rotation Limit of Solitary Waves of the Ostrovsky Equation (with Yue Liu), *Discrete and Continuous Dynamical Systems, Series B*, **7** (2007), no. 4, 793-806.
8. Stability of Solitary Waves of a Generalized Ostrovsky Equation (with Yue Liu), *SIAM J. on Mathematical Analysis*, **38** (2006), no. 3, 985-1011.
9. Partial Differential Equations: An Introduction, Student Solutions Manual (with Walter Strauss and Julie Levandosky), February 2008, ISBN: 978-0-470-26071-5
10. Linear Algebra, *Pearson Custom Publishing*, Boston, 2001, ISBN 0-536-66747-0
11. Time decay for the nonlinear beam equation. Cathleen Morawetz: a great mathematician. (with Walter Strauss) *Methods Appl. Anal.* **7** (2000), no. 3, 479–487.

12. A stability analysis of fifth-order water wave models. *Physica D* **125** (1999), no. 3-4, 222–240.
13. Stability and instability of fourth-order solitary waves. *Journal of Dynamics and Differential Equations* **10** (1998), no. 1, 151–188.
14. Decay estimates for fourth order wave equations. *Journal of Differential Equations* **143** (1998), no. 2, 360–413.

OTHER PROFESSIONAL ACTIVITIES

Referee for *Journal of Mathematical Analysis and Applications*.

Referee for *Journal of Differential Equations*.

Referee for *Analysis and Mathematical Physics*.

Referee for *Nonlinearity*.

Co-organizer (with Dave Damiano) of Special Session on Undergraduate Research, AMS Eastern Sectional Meeting, Spring 2011

Referee for *Proceedings of the Royal Society of London*.

Referee for *Discrete and Continuous Dynamical Systems*.

Referee for *Applicable Analysis*.

Referee for *Mathematics and Computers in Simulation*.

Reviewer for Mathematical Reviews.

Referee for *Physica D*.

Referee for *SIAM Review (Education Section)*.

COMMUNITY SERVICE

Member, Board of Directors, Hopkinton Area Land Trust. Summer 2017 - present.

Steward, Sudbury Valley Trustees. Summer 2017 - present.

Steward, Hopkinton Area Land Trust. Fall 2016 - present.

Coach, Hopkinton Youth Soccer Association.