

Curriculum Vitae

Steven Levandosky

Contact Information

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Education

- Brown University, Providence, Rhode Island
Ph.D. Mathematics (1997)
- College of the Holy Cross, Worcester, Massachusetts
B.A. Mathematics (1992)

Employment

- 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
- University of Texas at Austin, Instructor, August 1997 - July 1999
- Brown University, Teaching Fellow/Teaching Assistant, 1993-1997

Publications

- (with Amin Esfahani) Solitary waves of a coupled KdV system with a weak rotation, (in preparation)
- (with Amin Esfahani) Stability of solitary waves of the Kadomtsev-Petviashvili equation with weak rotation, (to appear)
- (with Amin Esfahani) Solitary Waves of the Generalized Rotation-Generalized Benjamin-Ono Equation, *Discrete and Continuous Dynamical Systems, Series A*, **33** (2013), no. 2, 663-700.
- On the Stability of Solitary Waves of the Generalized Ostrovsky Equation, *Analysis and Mathematical Physics*, **2** (2012), no. 4, 407-437.
- (with Amin Esfahani) Stability of Solitary Waves for the Generalized Higher-Order Boussinesq Equation, *Journal of Dynamics and Differential Equations*, **24** (2012), no. 2, 391-425.
- Stability of Solitary Waves of a Fifth-Order Water Wave Model., *Physica D*, **227** (2007), no. 2, 162-172.
- (with Yue Liu) Stability and Weak Rotation Limit of Solitary Waves of the Ostrovsky Equation. *Discrete and Continuous Dynamical Systems, Series B*, **7** (2007), no. 4, 793-806.
- (with Yue Liu) Stability of Solitary Waves of a Generalized Ostrovsky Equation. *SIAM J. on Mathematical Analysis*, **38** (2006), no. 3, 985-1011.

- (with Walter Strauss and Julie Levandosky) Partial Differential Equations: An Introduction, Student Solutions Manual, February 2008, ISBN: 978-0-470-26071-5
- Linear Algebra, *Pearson Custom Publishing*, Boston, 2001, ISBN 0-536-66747-0
- (with Walter Strauss) Time decay for the nonlinear beam equation. Cathleen Morawetz: a great mathematician. *Methods Appl. Anal.* **7** (2000), no. 3, 479–487.
- A stability analysis of fifth-order water wave models. *Physica D* **125** (1999), no. 3-4, 222–240.
- Stability and instability of fourth-order solitary waves. *Journal of Dynamics and Differential Equations* **10** (1998), no. 1, 151–188.
- 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 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)*.

Courses Taught at Holy Cross

- Spring 2017: Math 136 (Calculus 2)
- Fall 2016: Math 242 (Principles of Analysis), Math 361 (Real and Abstract Analysis 1)
- Spring 2016: Math 242 (Principles of Analysis)
- Fall 2015: Math 371 (Numerical Analysis 1)
- Spring 2015: Math 242 (Principles of Analysis) and Math 362 (Real Analysis 2)
- Fall 2014: Math 242 (Principles of Analysis) and Math 361 (Real Analysis 1)
- Spring 2014: Math 136 (Calculus 2) and Math 242 (Principles of Analysis)
- Fall 2013: Math 242 (Principles of Analysis) and Math 305 (Complex Analysis)
- Spring 2013: Math 241 (Multivariable Calculus) and Math 362 (Real Analysis II)
- Fall 2012: Math 136 (Calculus 2) and Math 361 (Real Analysis I)
- Spring 2012: Math 136 (Calculus 2) and Math 371 (Numerical Analysis)
- Fall 2011: Math 135 (Calculus 1) and Math 242 (Principles of Analysis)
- Spring 2010: Math 241 (Multivariable Calculus) and Math 242 (Principles of Analysis)
- Fall 2009: Math 136 (Advanced Placement Calculus) and Math 305 (Complex Analysis)

- Spring 2009: Math 242 (Principles of Analysis) and Math 373 (Partial Differential Equations)
- Fall 2008: Math 241 (Multivariable Calculus) and Math 304 (Differential Equations)
- Spring 2008: Math 126 (Calculus II) and Math 242 (Principles of Analysis)
- Fall 2007: Math 125 (Calculus I) and Math 371 (Numerical Analysis)
- Spring 2006: Math 132 (Calculus II) and Math 242 (Principles of Analysis)
- Fall 2005: Math 131 (Calculus I), Math 241 (Multivariable Calculus) and Math 371 (Numerical Analysis)
- Spring 2005: Math 132 (Calculus II) and Math 362 (Real Analysis II)
- Fall 2004: Math 131 (Calculus I) and Math 361 (Real Analysis I)
- Spring 2004: Math 132 (Calculus II) and Math 126 (Calculus II)
- Fall 2003: Math 125 (Calculus I) and Math 126 (Calculus II)

Additional Teaching Activities

- Spring 2017: Math 400 (Directed Reading: Real and Abstract Analysis 2, 5 students)
- Spring 2015: Math 400-03 (Directed Reading: Hilbert Spaces) and Math 400-06 (Directed Reading: Analysis and Probability)
- Fall 2014: Math 400-02 (Directed Reading: Functional Analysis)
- Spring 2014: Math 400 (Directed Reading: Advanced ODEs) and Math 496 (Honors Thesis, 2 students)
- Fall 2013: Math 495 (Honors Thesis, 2 students)
- Summer 2013: Holy Cross Summer Research Program - supervised 2 students
- Spring 2013: Math 200 (Independent Study) and Math 496 (Honors Thesis)
- Fall 2012: Math 495 (Honors Thesis)

College and Departmental Service

- Math/CS Department Chair. 2015–2017
- 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
- 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
- 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