Ashish Kumar Pandey

RESEARCH INTERESTS

Nonlinear PDEs– especially stability problems, mathematical physics and harmonic analysis.

EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

Ph.D. Candidate, Mathematics (August 2013 to current, expected May 2017)

• Advisor: Vera Mikyoung Hur

Cornell University, New York

Ph.D. Candidate, Mathematics (August 2012 to July 2013, transferred to UIUC)

National Institute of Science Education and Research (NISER), India

Integrated M.Sc., Mathematics (August 2007 to May 2012)

• Minor in physics

PUBLICATIONS

Transverse instability in rotation-modified Kadomtsev-Petviashvili equation, in preparation (with Vera Mikyoung Hur and Mathew A. Johnson).

Modulational instability in a full-dispersion shallow water model, submitted (August 2016) 56 pages (with Vera Mikyoung Hur).

Modulational instability in nonlinear nonlocal equations of regularized long wave type, Physica D: Nonlinear Phenomena (2016), no. 325, 98-112 (with Vera Mikyoung Hur).

Conference Talks

Not yet decided, The Tenth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA (April 2017).

Transverse instability in full-dispersion Kadomtsev-Petviashvili equation, JMM, Atlanta, GA (January 2017).

Modulational Instability in KdV, BBM, and Boussinesq type equations, The 2016 Annual Meeting of the Illinois Section of the Mathematical Association of America (ISMAA), Illinois College (April 2016).

POSTER PRESENTATIONS

Modulational instability in a full-dispersion shallow water model, SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, PA (August 2016).

Modulational instability in a full-dispersion shallow water model, Gene Golub SIAM Summer School, Drexel University (August 2016).

Modulational instability in a full-dispersion shallow water model, Analysis of Partial Differential Equations using Dynamical Systems Techniques: A conference in honor of the 60th birthday of C. Eugene Wayne, Boston University (June 2016).

Modulational instability in nonlinear dispersive equations, KUMU PDE, Dynamical Systems and Applications, University of Kansas (April 2015).

OTHER TALKS Modulational instability in nonlinear dispersive equations, Computational and Applied Mathematics seminar, University of Kansas (September 2016). Modulational Instability in KdV, BBM, and Boussinesq type equations, Harmonic Analysis and Differential Equations Seminar (HADES), UIUC (February 2016). Fall 2016 Teaching Assistant, Calculus I Teaching Fall 2015 Teaching Assistant, Calculus III EXPERIENCE Summer 2015 NetMath Teaching Assistant, Differential equations Teaching Assistant, Calculus II Spring 2015 Teaching Assistant, Calculus II Spring 20142013 Teaching Assistant, Calculus I Fall 2013 - 2016Selection for the UIUC List of Teachers Ranked as Excellent: Fall Honors and 2013, Spring 2014, Fall 2015 AWARDS 2012 Best dissertation award in Integrated M.Sc., NISER, India Gold Medallist in Integrated M.Sc. at NISER, India 2012 INSPIRE Fellowship, Govt. of India 2007 - 2012GRADUATE $\hfill \square$ Partial Differential Equations ☐ Applied Stochastic Processes ${\bf Coursework}$ □ Nonlinear Analysis ☐ Analytic Number Theory ☐ Methods of Applied Mathematics □ Ergodic Theory ☐ Bifurcation Theory References Vera Mikyoung Hur, Associate Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, verahur@math.uiuc.edu Contact Department of Mathematics (217)418-7041Information University of Illinois at Urbana-Champaign akpande2@illinois.edu 1409 W Green St, Urbana, IL 61801 http://www.math.uiuc.edu/~akpande2