

# Evan D. Randles, Ph.D.

Assistant Professor of Mathematics

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## Employment

Colby College, Assistant Professor of Mathematics, 2017-present

University of California, Los Angeles, Assistant Adjunct Professor of Mathematics, 2016-2017

## Education

Ph.D. Applied Mathematics, Cornell University, 2016

Advisor: Professor Laurent Saloff-Coste

Thesis: *Convolution powers of complex-valued functions and related topics in partial differential equations*

M.S. Applied Mathematics, Cornell University, 2014

M.S. Mathematics, California State University, Northridge 2011

*Masters with Distinction*

Advisor: Professor David Klein

Thesis: *Spacelike foliations of Robertson-Walker spacetimes by Fermi space slices*

B.S. Physics, California State University, Northridge 2010

*Summa Cum Laude*

B.A. Mathematics, California State University, Northridge 2010

*Summa Cum Laude*

A.S. Welding Technology, College of the Canyons, 2005

*With High Honors*

## Teaching Experience

Colby College, Spring 2019

Instructor for Math 311 (Ordinary Differential Equations) and Math 411 (Partial Differential Equations)

Colby College, Fall 2018

Instructor for Math 122 (Series and Multivariable Calculus) and Math 311 (Ordinary Differential Equations)

Colby College, Spring 2018

Instructor for Math 122 (Series and Multivariable Calculus) and Math 398 (Fourier Analysis)

Colby College, Fall 2017

Instructor for Math 121 (Calculus I) and Math 311 (Ordinary Differential Equations)

University of California, Los Angeles, Spring 2017

Instructor for Math 170 A (Probability I) and Math 170 B (Probability II)

University of California, Los Angeles, Winter 2017

Instructor for Math 131 A (Analysis I)

University of California, Los Angeles, Fall 2016

Instructor for Math 131 B (Analysis II) and Math 32A (Calculus of Several Variables)

Ithaca High School-Cornell University, Spring 2015

Instructor for Senior Seminar (Fourier Analysis)

Cornell University, Department of Mathematics, Spring 2015

Instructor for Math 1110 (Calculus 1)

Cornell University, Department of Mathematics, Fall 2014

Teaching Assistant for Math 2220 (Vector Calculus)

California State University, Northridge, Department of Mathematics, Summer 2010

Guest Lecturer/Teaching Assistant, Math 350 (Advanced Calculus), Math 320 (Intro to Proofs)

California State University, Northridge, PUMP Program, Summer 2010

Summer Institute Instructor for PUMP (Preparing Undergraduates through mentoring toward PhDs)

College of the Canyons, TLC Tutoring Lab, 2006-2008

Lead Tutor specializing in mathematics, physics and engineering

## **Fellowships/Scholarships**

2012-2015 NSF Graduate Research Fellowship Program

2011-2012 Research Training Group Graduate Assistantship in Probability (Funding NSF)

2010-2011 Bridge to the Doctorate Fellow, Louis Stokes Alliances for Minority Participation (LSAMP) Program (Funding NSF-CSU)

2007-2008 PUMP Scholarship, Preparing Undergraduates through Mentoring toward PhDs (PUMP) Program (Funding NSF-DMS-0502258)

## Awards

Distinguished Teaching Award, Department of Mathematics, University of California, Los Angeles, Recipient 2017

Award for Outstanding Graduate Achievement, Department of Mathematics, California State University, Northridge, Recipient 2011

Heald Outstanding Graduating Senior Award, College of Science and Mathematics, California State University, Northridge, Recipient 2010

John W. Nagle Outstanding Senior Award, Department of Physics and Astronomy, California State University, Northridge, Recipient 2010

## Research Interests

Fourier Analysis, Probability, Partial Differential Equations, Mathematical Physics

## Publications

*Fermi coordinates, simultaneity, and expanding space in Robertson-Walker cosmologies* (with David Klein), *Annales Henri Poincaré* **12** 303-328 (2011)

*On the Convolution Powers of Complex Functions on  $\mathbb{Z}$*  (with Laurent Saloff-Coste), *Journal of Fourier Analysis and Applications* **21**(4) 754-798 (2015)

*Convolution Powers of Complex Functions on  $\mathbb{Z}^d$*  (with Laurent Saloff-Coste), *Revista Matemática Iberoamericana*, **33**(3) 1045-1121 (2017)

*Positive-homogeneous operators, heat kernel estimates and the Legendre-Fenchel transform* (with Laurent Saloff-Coste), *Stochastic Analysis and Related Topics: A Festschrift in Honor of Rodrigo Bañuelos*. Progress in Probability, Vol. 72 (2017)

*Uniformly positive-homogeneous operators with measurable coefficients* (with Laurent Saloff-Coste) (in preparation)

## Conference and Seminar Talks

*Convolution powers of complex-valued functions*. Department of Mathematics & Statistics, University of Maine. November 2017.

*Convolution powers of complex-valued function on  $\mathbb{Z}^d$* . Department of Mathematics and Statistics, Bowdoin College, October 2017.

*Convolution powers of complex-valued functions*. Department of Mathematics and Statistics, Swarthmore College. February 2017.

*Convolution powers of complex-valued functions*. Department of Mathematics and Statistics, Colby College. February 2017.

*Convolution powers of complex-valued functions on  $\mathbb{Z}^d$* . Probability Seminar, University of British Columbia. September 2016.

*Convolution powers of complex-valued functions.* Department of Mathematics, Colgate University. January, 2016.

*Heat kernel estimates corresponding to uniformly positive-homogeneous operators.* Analysis Seminar, Cornell University, Ithaca. October 2015

*The Stability of Matter: an important chapter in mathematical physics* (expository talk). *CAM Colloquially!*, the student speaker series. Cornell University, Ithaca. November 2015

*Convolution powers of complex-valued functions on  $\mathbb{Z}^d$ .* Analysis Seminar, Cornell University, Ithaca. February 2015

*Heat kernel estimate corresponding to higher order partial differential operators.* Mathematics colloquium, California State University, Northridge. January 2014

*Convolution powers of finitely supported function on  $\mathbb{Z}$ .* Northeast probability seminar, Columbia University, New York. November 2012

*Fermi coordinates, simultaneity, and expanding space.* Mathematics & Physics colloquium, California State University, Northridge. December 2010

## Conferences, Summer Schools and Workshops Attended

Probability Summer School, Northwestern University. July 2016.

Finger Lakes Probability Seminar, Cornell University. May 2016.

AMS National Meeting, Seattle. January 2016.

Cornell Probability Summer School, Cornell University. July 2014.

Rough Path Theory Workshop, IPAM, UCLA. January 2014.

Cornell Probability Summer School, Cornell University. July 2013.

Northeast Probability Seminar, Columbia University. November 2012

Princeton Institute for the Science and Technology of Materials (REU), Princeton University. Summer 2009

## Service

Department colloquium organizer, Department of Mathematics & Statistics, Colby College.

Referee for the Journal of Potential Analysis.

Organizer for *CAM Colloquially!*, the student speaker series. Center for Applied Mathematics, Cornell University, 2015

Volunteer/Mentor. Louis Stokes Alliances for Minority Participation (LSAMP), Bridge to the Doctorate Program, 2014