

CURRICULUM VITAE

Name: Ivan Zachary Corwin

Email: ic2354@columbia.edu

Education Courant Institute, NYU (New York, NY), Ph.D. in Mathematics 2007-2011
Harvard University (Cambridge, MA), A.B. Magna Cum Laude in Mathematics 2002-2006

Research Interests Probability, mathematical / statistical physics, quantum integrable systems, stochastic PDEs, random matrix theory.

Academic positions Full Professor, Columbia University (New York, NY) 2017-
Associate Professor, Columbia University (New York, NY) 2013-2017
Research Fellow, Clay Mathematics Institute (Cambridge, MA) 2012-2016
Visiting Professor, Pierre and Marie Curie University (Paris, France) 2014-2015
C.L.E. Moore Instructor, MIT (Cambridge, MA) 2012-2014
Postdoctoral Fellow, Microsoft Research (Cambridge, MA) 2011-2012

Honors and Distinctions Packard Fellowship 2014-2019
Rollo Davidson Prize 2014
Poincaré Chair, Institut Henri Poincaré 2014-2015
Invited lecture, International Congress of Mathematicians 2014
Young Scientist Prize, International Union of Pure and Applied Physics 2012
Clay Research Fellowship 2012-2016
Schramm Memorial Postdoctoral Fellowship 2011-2014

Professional Service Semester program organizer:
◊ New Approaches to Non-equilibrium and Random Systems (KITP Santa Barbara CA, 2016).

Summer school organizer:
◊ Park City Mathematics Institute on Random Matrix Theory (Park City UT, 2017).
◊ Quantum Integrable Systems, Conformal Field Theories and Stochastic Processes (Corsica FR, 2016).
◊ Summer Workshop on Stochastic Partial Differential Equations, (MSRI Berkeley CA, 2014).

Conference organizer:
◊ Dyson-Schwinger equations, topological expansions and random matrices (New York NY, 2017).
◊ Dynamics, Aging and Universality in Complex Systems (New York NY, 2017).
◊ Random polymers and algebraic combinatorics (Oxford UK, 2015).
◊ Clay Research Conference on Advances in Probability (Oxford UK, 2014).
◊ From Macdonald Processes to Hecke Algebras and Quantum Integrable Systems (IHP Paris FR, 2014).
◊ Workshop on the KPZ Equation and Universality Class (AIM Palo Alto CA, 2011).

Seminar organizer:
◊ Northeast Probability Seminar (2014, 2017).
◊ Columbia-Princeton Probability Day (2014–present).
◊ Columbia-Courant Joint Probability Seminar (2013–present).
◊ Columbia Probability Seminar (2013–present).
◊ Charles River Lectures on Probability and Related Topics (2012–2014).

- ◇ MIT Probability Seminar (2011–2013).

Journal editor:

- ◇ Probability Theory and Related Fields (Associate Editor, 2015–present).
- ◇ Annales de l'Institut Henri Poincaré (Associate Editor, 2013–present).
- ◇ Selecta Mathematica (Editorial Board Member, 2015–present).
- ◇ SIGMA (Symmetry, Integrability and Geometry: Methods and Applications) (Editorial Board Member, 2017–present).
- ◇ Journal of Statistical Physics (Editorial Board Member, 2013–present).

Advisor:

- ◇ Guillaume Barraquand (Columbia Postdoc, 2015–present).
- ◇ Jeffrey Kuan (Columbia Postdoc, 2015–present).
- ◇ Hao Shen (Columbia Postdoc, 2015–Present).
- ◇ Li-Cheng Tsai (Columbia Postdoc, 2016–present).
- ◇ Alisa Knizel (Columbia Postdoc, 2017–present).
- ◇ Promit Ghosal (Columbia Grad Student, 2015–present).
- ◇ Shalin Parakh (Columbia Grad Student, 2017–present).
- ◇ Xuan Wu (Columbia Grad Student, 2014–present).

Committees:

- ◇ Centennial Fellowship Committee (AMS, 2017-2019).
- ◇ Math Meetings Subcommittee of the Committee on Meetings and Conferences (AMS, 2017-present).

Congress Lectures

- ◇ 61st Annual Meeting of the Australian Mathematical Society 2017 (Plenary).
- ◇ International Congress of Mathematicians 2014 (Invited).
- ◇ 37th Conference on Stochastic Processes and their Applications 2014 (Plenary).
- ◇ International Congress of Mathematical Physics 2012 (Invited).

Distinguished Lectures

- ◇ Chern-Simons Lectures (Berkeley CA, 2017).
- ◇ Abel Symposium (Rosendal Norway, 2016).
- ◇ 50th Swiss Probability Seminar Celebration (Zurich CH, 2016).
- ◇ Texas Analysis and Mathematical Physics Symposium (Dallas TX, 2015).
- ◇ Charles River Lectures on Probably and Related Topics (Cambridge MA, 2015).
- ◇ Lipschitz Lectures (Bonn Germany, 2013).
- ◇ MSRI Evans Lecture (Berkeley CA, 2010).

Colloquia

- ◇ Caltech (2016)
- ◇ Courant Institute (2012).
- ◇ Ecole Normal Superior: Mathematics (2014).
- ◇ Kavli Institute for Theoretical Physics (2016).
- ◇ Mathématiques Appliquées à Paris 5 (2015).
- ◇ Montreal (2016)
- ◇ Rutgers (2016).
- ◇ Stanford University (2017, 2013).
- ◇ SUNY Binghamton (2017).
- ◇ Temple University (2015).
- ◇ University of California Berkeley (2017).
- ◇ University of California Los Angeles (2013).
- ◇ University of Connecticut (2013).
- ◇ University of Geneva (2014).
- ◇ University of Maryland (2015).

- ◇ University of Oregon (2015).
- ◇ University of Southern California (2017).
- ◇ University of Toronto (2012).
- ◇ University of Virginia (2012).
- ◇ University of Washington (2015).

Lecture Series

- ◇ School on Random Matrix Theory (Michigan, 2018).
- ◇ Integrable Models in Statistical Mechanics, Limit Shapes and Combinatorics (St. Petersburg Russia, 2017).
- ◇ Probabilistic Perspectives in Nonlinear PDEs (Edinburgh Scotland, 2017).
- ◇ AMS Short Course on First and Last Passage Percolation Models (Atlanta GA, 2017).
- ◇ London Mathematical Society – Clay Mathematics Institute Research School (Oxford UK, 2015).
- ◇ Institute Henri Poincaré (Paris France, 2015).
- ◇ New Researcher Tutorials at Seminar on Stochastic Processes (Delaware, 2015).
- ◇ Introductory School for Institute Henri Poincaré trimester on Disordered System, Random Spatial Processes and Applications (Marseilles FR, 2015).
- ◇ Summer College on Non-Linear Dynamics, Instabilities and Patterns in Classical and Quantum Systems (Trieste IT, 2014).
- ◇ Summer School on Stochastic Partial Differential Equations (Berkeley CA, 2014).
- ◇ Paris 6 (Paris FR, 2014).
- ◇ Summer School on Random Matrix Theory (Bielefeld DE, 2013).
- ◇ Summer School on KPZ Equation and Rough Paths (Rennes FR, 2013).
- ◇ Simons Symposium on the Kardar-Parisi-Zhang Equation (U.S. Virgin Island, 2013).
- ◇ Chiba University (Chiba JP, 2012).
- ◇ Grandes Matrices Aléatoires (Paris FR, 2012).
- ◇ NSF Pan-American Advanced Studies Institute (Santiago CL, 2012).
- ◇ 4th La Pietra Week in Probability (Florence IT, 2011).
- ◇ Groupe de Travail at the Institut Herri Poincaré (Paris FR, 2011).
- ◇ IMPA (Rio de Janeiro BR, 2011).
- ◇ U.C. Berkeley (Berkeley CA, 2010).

Conference Lectures

- ◇ Amir Dembo Birthday Conference (Stanford, 2018).
- ◇ Classical and Quantum Integrable Systems (Dubna RU, 2017).
- ◇ Thera Stochastics (Santorini GR, 2017).
- ◇ 117th Statistical Mechanics Conference (Rutgers NJ, 2017).
- ◇ Asymptotic Representation Theory (Paris FR, 2017).
- ◇ Recent Advances in Mathematical Physics (Tokyo JP, 2017).
- ◇ AMS Special Session on Random Matrices, Random Percolation and Random Sequence Alignments (Atlanta GA, 2017).
- ◇ Clifford Lectures (New Orleans LA, 2016).
- ◇ Stochastic Partial Differential Equations (Stonybrook NY, 2016)
- ◇ Infinite Analysis 2016: New Developments in Integrable Systems (Osaka JP, 2016).
- ◇ Six-Vertex Models, Dimers, Shapes, and All That (Stonybrook NY, 2016).
- ◇ Isoperimetric Problems and Manifolds with Density (Williamstown MA, 2016).
- ◇ Random Processes and Random Media (Zurich CH, 2016).
- ◇ Random Matrices, Random Growth Processes and Statistical Physics (Stonybrook NY, 2015).
- ◇ Random Interfaces and Integrable Probability (Florence IT, 2015).
- ◇ Asymptotics in Integrable Systems, Random Matrices, Random Processes and Universality (Montreal CA, 2015).
- ◇ 113th Statistical Mechanics Conference (Rutgers NJ 2015).
- ◇ Limit Shapes (Providence RI, 2015).

- ◇ Interacting Particle Systems and Non-Equilibrium Dynamics (Paris FR, 2015).
- ◇ Fourth Abel Conference (Minnesota, 2014).
- ◇ Interface fluctuations and KPZ universality class - unifying mathematical, theoretical, and experimental approaches (Kyoto JP, 2014).
- ◇ 16th Rencontres Mathematiques de Rouen (Rouen FR, 2014).
- ◇ Stochastic analysis: Around the KPZ Universality Class (Oberwolfach DE, 2014).
- ◇ Random Matrices and Random Systems (Princeton NJ, 2014).
- ◇ Rough Paths: Theory and Applications (Los Angeles CA, 2014).
- ◇ Cornell Probability Summer School (Ithaca NY, 2013).
- ◇ Random Matrix Theory and Applications (Ann Arbor MI, 2013).
- ◇ Analytical Aspects of Mathematical Physics (Zurich CH, 2013).
- ◇ Emerging Trends in Probability Theory (Leipzig DE, 2013).
- ◇ Random polymers (Eindhoven NE, 2013).
- ◇ 108th Statistical Mechanics Conference (Rutgers NJ, 2012).
- ◇ Integrable Systems, Growth Processes and KPZ Universality (Banff CA, 2012).
- ◇ Interacting Particle Systems and Related Topics (Florence IT, 2012).
- ◇ Discrete Probability on Surfaces (Madison WI, 2012).
- ◇ Stochastic Partial Differential Equations with Applications (Istanbul TR, 2012).
- ◇ Random Polymers (Singapore, 2012).
- ◇ Random Walks and Random Media (Berkeley CA, 2012).
- ◇ UK Easter Probability Meeting (Warwick UK, 2011).
- ◇ Interacting Particle Systems, Growth Models and Random Matrices (Warwick UK, 2011).
- ◇ Disordered Media (Warwick UK, 2011).
- ◇ 4th La Pietra week in Probability (Florence IT, 2011).
- ◇ Stochastic Analysis (Oberwolfach DE, 2011).
- ◇ Random Environments (Ithaca NY, 2011).
- ◇ Interacting Processes in Random Environments (Toronto CA, 2011).
- ◇ Large Scale Stochastic Dynamics (Oberwolfach DE, 2010).
- ◇ 28th Annual Western States Mathematical Physics Meeting (Los Angeles CA, 2010).
- ◇ Interacting Stochastic Particle Systems (Montreal CA, 2009).

Seminar Lectures

- ◇ Boston University: Probability (2012), Polymer Studies (2011).
- ◇ Brown University: Probability (2015, 2013), Discrete Math (2012, 2011).
- ◇ Caltech: Mathematical Physics (2016).
- ◇ Columbia University: Applied Probability and Risk (2017), Informal Mathematical Physics (2015), Probability (2013, 2012², 2010).
- ◇ Courant: Probability (2011³, 2010).
- ◇ CUNY: Probability (2014, 2010).
- ◇ Delft: Probability (2011)
- ◇ Duke: Probability (2011).
- ◇ EURANDOM: Random Spatial Structures (2011).
- ◇ Georgia Tech: Probability (2012).
- ◇ Harvard: Probability (2015, 2013, 2012² 2011), Random Matrix (2012, 2009).
- ◇ IAS: Random Matrix (2013), Mathematical Physics (2011), Analysis/Mathematical Physics (2011).
- ◇ Microsoft Research: Theory (2011).
- ◇ MIT: Probability (2016, 2012, 2011, 2009), Combinatorics (2013).
- ◇ Northeastern University: Applied and Interdisciplinary Mathematics (2012).
- ◇ Paris 6 and 7: Probability (2014, 2011).
- ◇ Princeton: Mathematical Physics (2014), Probability (2014), Ergodic Theory and Statistical Mechanics (2011).
- ◇ Rutgers: Mathematical Physics (2012).

- ◇ Stanford: Probability (2010).
- ◇ Tel Aviv University: Probability (2011)
- ◇ Temple University and University of Pennsylvania: Probability (2015).
- ◇ Tokyo University: Integrable Systems (2012).
- ◇ UC Berkeley: Probability (2013), Statistics (2011), Combinatorics (2011).
- ◇ UC Davis: Mathematical Physics and Probability (2017, 2013, 2010).
- ◇ UC Irvine: Probability (2010).
- ◇ UCLA: Probability (2016, 2010).
- ◇ UIUC: Probability (2015).
- ◇ UMD: Probability (2015, 2012).
- ◇ UO: Probability (2015).
- ◇ UT Austin: Mathematical Physics (2014).
- ◇ UVA: Probability (2014, 2012).
- ◇ Universite Catholique de Louvain: Probability (2011).
- ◇ University of British Columbia: Probability (2012, 2010).
- ◇ University of Chicago: Probability (2012).
- ◇ University of Geneva: Mathematical Physics (2014).
- ◇ University of Michigan: Combinatorics (2012), Analysis/Probability (2012).
- ◇ University of Rochester: Probability (2011).
- ◇ University of Toronto: Probability (2010).
- ◇ University of Utah: Stochastics (2012, 2010).
- ◇ University of Warwick: Random Matrix (2011).
- ◇ University of Wisconsin: Probability (2009).
- ◇ Weizmann Institute: Probability (2014, 2011).
- ◇ Zurich: Probability (2014, 2013).