# **Curriculum Vitae**

# **Eyal Lubetzky**

Courant Institute of Mathematical Sciences New York University 251 Mercer Street New York, NY 10012, USA

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#### **RESEARCH AREA:**

**Probability Theory and Combinatorics** 

## **APPOINTMENTS:**

• 2017–present: Professor of Mathematics,

Courant Institute of Mathematical Sciences, New York University.

• 2014–2017: Associate Professor of Mathematics,

Courant Institute of Mathematical Sciences, New York University.

2013–2014: Senior Researcher, Theory Group of Microsoft Research.
 2008–present: Affiliated faculty (Assistant Professor / Associate Professor),

Mathematics Department, University of Washington.

• 2008–2013: Researcher, Theory Group of Microsoft Research.

#### **EDUCATION:**

2007–2008: Post-doctoral Researcher, Theory Group of Microsoft Research.
 2002–2007: Ph.D. in Mathematics (with distinction), Tel-Aviv University

Performed under the supervision of Prof. Noga Alon.

Thesis title: Graph powers and related extremal problems.

• 1999–2002: B.Sc. in Mathematics and Computer Science (Summa Cum Laude)

Tel-Aviv University

#### **AWARDS AND HONORS:**

2016–2017	AMS Centennial Fellowship
2016	Fellow of the Institute of Mathematical Statistics
2013	Rollo Davidson Prize
2007	Rothschild Postdoctoral Fellowship (not used)
2006	The Charles Clore Foundation Fellowship for Ph.D. students
2006	The Celia and Marcos Maus Annual Prize for Ph.D. students
1999–2001	Three annual Chairman of the Israeli Parliament (Knesset) and Chairman of the

Israeli Education Committee awards

1999–2001	Three annual Provost's list awards, Faculty of Exact Sciences, Tel Aviv University
1999–2001	Three annual Dean's list awards, Faculty of Exact Sciences, Tel Aviv University
2000, 2001	Two Wolf Scholarship awards for B.Sc. students
2001	Excellence award, School of Computer Science, Tel Aviv University
1999	Award of excellence for first year B.Sc. students, Schools of Computer Science
	and Mathematics, Tel Aviv University

### SELECTED INVITED TALKS IN CONFERENCES / WORKSHOPS:

- IHÉS mini-course at the Probability Summer School for graduate students, Paris, Jul 2017.
- Random Structures & Algorithms, Pittsburgh, Jul 2015 (*plenary address*).
- Stochastic Processes and Applications (SPA), Buenos Aires, Aug 2014 (plenary address).
- Invited course at the 10<sup>th</sup> Cornell Probability Summer School, Jul 2014.
- EuroComb 2011, Budapest, Aug 2011 (plenary address).
- La-Pietra 2011 conference on Probability, Florence, Jun 2011 (5-lecture mini-course).

## **SELECTED INVITED TALKS IN COLLOQUIA:**

- Yale Colloquium, Mathematics Department, Sep 2016.
- UCLA Colloquium, Mathematics Department, Jan 2014.
- Hebrew University Colloquium, Mathematics Department, Dec 2012.
- Stanford University Colloquium, Mathematics Department, May 2012.
- Tel Aviv University Colloquium, Mathematics Department, Jun 2011.

#### **SELECTED WORKS:**

• G. Gheissari and E. Lubetzky,

Maximum and shape of interfaces in 3D Ising crystals,

Communications in Pure and Applied Mathematics 75 (2022), no. 12, 2575–2684.

• E. Lubetzky and A. Sly,

Information percolation and cutoff for the stochastic Ising model,

Journal of the American Mathematical Society 29 (2016), 729–774.

• E. Lubetzky and Y. Peres,

Cutoff on all Ramanujan graphs,

Geometric and Functional Analysis 26 (2016), no. 4, 1190–1216.

• E. Lubetzky and A. Sly,

Cutoff for the Ising model on the lattice,

*Inventiones Mathematicae* 191 (2013), no. 3, 719–755.

• E. Lubetzky and A. Sly,

Cutoff phenomena for random walks on random regular graphs,

Duke Mathematical Journal 153 (2010), no. 3, 475–510.

### **INTERNS MENTORED:**

•	Yufei Zhao	Summer 2012	(while a graduate student at MIT)
•	Robin Moser	Winter 2009	(while a graduate student at ETH Zurich)

• Po-Shen Loh Summer 2009 (while a graduate student at Princeton University)

• Allan Sly Summer 2008 (while a graduate student at UC Berkeley)

#### **SERVICES:**

- Associate Editor: Transactions and Memoirs of the AMS, Mar 2024 present.
- Associate Editor: Comm. Pure Applied Math, Sep 2023 present.
- Associate Editor: Probability and Mathematical Physics, Sep 2019 present.
- Workshop co-organization: "Random media and large deviations," Mar 2022.
- Workshop co-organization: "Markov chain mixing times," AIM, Jun 2016.
- Associate Editor: Probability Theory and Related Fields, Sep 2010 Aug 2015.
- Associate Editor: Annals of Applied Probability, Jan 2009 Dec 2015.
- Workshop co-organization: "Probabilistic & Extremal Combinatorics," IMA, Sep 2014.
- Workshop co-organization: "Percolation & Interacting Systems," MSRI, Berkeley, Feb 2012.
- Program Committee, SODA 2010 (ACM-SIAM Symposium on Discrete Algorithms).

# **TEACHING:**

- Courant Institute, New York University: *Honors Theory of Probability* (Spring21, 20), *Probability Theory I* (Fall20), *Probability Limit Theorems I* (Fall19, 18, 17, 16, 15), *Theory of Probability* (Spring19), *Honors Calculus II* (Spring16), *Advanced Topics in Probability: Markov chain analysis* (Spring21, 15), *Spin glasses* (Spring 20), Random regular graphs (Fall18), Martingale & concentration (Fall17).
- U. of Washington: *Advanced topics in Probability* (Spring09, Fall12), *Probabilistic Combinatorics* (Spring10) (Highly rated course recognition, College of Engineering),

### **LIST OF PUBLICATIONS:**

- J. Chen and E. Lubetzky,
  - Extrema of 3D Potts interfaces,
  - Communications in Mathematical Physics, to appear.
- J. Berestycki, Y.H. Kim, E. Lubetzky, B. Mallein and O. Zeitouni, The extremal point process of branching Brownian motion in  $\mathbb{R}^d$ , *Annals of Probability*, to appear.
- A. Dembo, E. Lubetzky and O. Zeitouni, On the limiting law of line ensembles of Brownian polymers with geometric area tilts, *Annales de l'Institut Henri Poincaré, Probab. Statist.*, to appear.
- E. Lubetzky and Y. Peled,
  - The threshold for stacked triangulations,
  - International Mathematics Research Notices (IMRN) (2023), Issue 19, 16296–16335.
- R. Gheissari and E. Lubetzky,
  - Entropic repulsion of 3D Ising interfaces conditioned to stay above a floor, *Electronic Journal of Probability* 28 (2023), 1–44.
- R. Gheissari and E. Lubetzky,
  - Approximate domain Markov property for rigid Ising interfaces, *Journal of Statistical Physics* 190 (2023), paper no. 99.

Annales of Applied Probability 33 (2023), no. 2, 1515–1568.

• Y.H. Kim, E. Lubetzky, and O. Zeitouni, The maximum of branching Brownian motion in  $\mathbb{R}^d$ ,

• E. Lubetzky and Y. Peled,

Noise sensitivity of critical random graphs,

*Israel Journal of Mathematics* 252 (2022), 187–21.

• Y. Alon, M. Krivelevich and E. Lubetzky,

Cycle lengths in sparse random graphs,

Random Structures and Algorithms 61 (2022), no. 3, 444–461.

• E. Lubetzky, C. Thornett and O. Zeitouni,

Maximum of Branching Brownian motion in a periodic environment,

Annales de l'Institut Henri Poincaré, Probab. Statist. 58 (2022), no. 4, 2065–2093.

• R. Gheissari and E. Lubetzky,

Maximum and shape of interfaces in 3D Ising crystals,

Communications in Pure and Applied Mathematics 75 (2022), no. 12, 2575–2684.

• A. Dembo, E. Lubetzky and O. Zeitouni,

Universality for Langevin-like spin glass dynamics,

Annals of Applied Probability 31 (2021), no. 6, 2864–2880.

• E. Lubetzky and A. Sly,

Fast initial conditions for Glauber dynamics,

Probability Theory and Related Fields 181 (2021), no. 1–3, 647–667.

• R. Gheissari and E. Lubetzky,

Tightness and tails of the maximum in 3D Ising interfaces,

Annals of Probability 49 (2021), no. 2, 732–792.

• I. Benjamini, E. Lubetzky and Y. Peled,

Minimum weight disk triangulations and fillings,

*Transactions of the American Mathematical Society* 374 (2021), no. 5, 3265–3287.

• A. Dembo, E. Lubetzky and Y. Zhang,

Empirical spectral distributions of sparse random graphs,

In and Out of Equilibrium 3, Celebrating Vladas Sidoravicius (Progr. Probab. 77) (2021), 319–345.

• E. Lubetzky, A. Lubotzky and O. Parzanchevski,

Random walks on Ramanujan complexes and digraphs,

*Journal of the European Mathematical Society (JEMS)* 22 (2020), no. 11, 3441–3466.

• M. Krivelevich, E. Lubetzky and B. Sudakov,

Asymptotics in percolation on high-girth expanders,

*Random Structures & Algorithms* 56 (2020), no. 4, 927–947.

• R. Gheissari and E. Lubetzky,

Quasi-polynomial mixing of critical 2D random cluster models,

Random Structures & Algorithms 56 (2020), no. 2, 517–556.

• R. Gheissari, E. Lubetzky and Y. Peres,

Exponentially slow mixing in the mean-field Swendsen–Wang dynamics,

Annales de l'Institut Henri Poincaré, Probab. Statist. 56 (2020), no. 1, 68–86.

Preliminary version appeared in the *Proc. of the 29rd ACM-SIAM SODA* (2018), 994–1046.

• A. Ben-Hamou, E. Lubetzky, and Y. Peres,

Comparing mixing times on sparse random graphs,

Annales de l'Institut Henri Poincaré, Probab. Statist. 55 (2019), no. 2, 1116–1130.

Preliminary version appeared in the *Proc. of the 29rd ACM-SIAM SODA* (2018), 1734–1740.

• A. Dembo and E. Lubetzky,

A large deviation principle for the Erdős–Rényi uniform random graph, *Electronic Communications in Probability* 23 (2018), paper no. 79, 13 pp.

• R. Gheissari, E. Lubetzky and Y. Peres,

Concentration inequalities for polynomials of contracting Ising models, *Electronic Communications in Probability* 23 (2018), paper no. 76, 12 pp.

• R. Gheissari and E. Lubetzky,

The effect of boundary conditions on mixing of 2D Potts models at discontinuous phase transitions, *Electronic Journal of Probability* 23 (2018), 1–30.

• R. Gheissari and E. Lubetzky,

Mixing times of critical two-dimensional Potts models,

Communications in Pure and Applied Mathematics 71 (2018), no. 5, 994–1046.

• N. Berestycki, E. Lubetzky, Y. Peres and A. Sly,

Random walks on the random graph,

Annals of Probability 46 (2018), no. 1, 456–490.

• E. Lubetzky and A. Sly,

Universality of cutoff for the Ising model,

Annals of Probability 45 (2017), no. 6A, 3664–3696.

• B.B. Bhattacharya, S. Ganguly, E. Lubetzky and Y. Zhao,

Upper tails and independence polynomials in random graphs,

*Advances in Mathematics* 319 (2017), 313–347.

• E. Lubetzky and Y. Zhao,

On the variational problem for upper tails of triangle counts in sparse random graphs, *Random Structures and Algorithms* 50 (2017), no. 3, 420–436.

• J. Kahn, E. Lubetzky and N. Wormald,

Cycle factors and renewal theory,

Communications in Pure and Applied Mathematics 70 (2017), no. 2, 289–339.

• E. Lubetzky and Y. Peres,

Cutoff on all Ramanujan graphs,

Geometric and Functional Analysis 26 (2016), no. 4, 1190–1216.

• E. Lubetzky, F. Martinelli and A. Sly,

Harmonic pinnacles in the Discrete Gaussian model,

Communications in Mathematical Physics 344 (2016), no. 3, 673–717.

• J. Kahn, E. Lubetzky and N. Wormald,

The threshold for combs in random graphs,

Random Structures and Algorithms 48 (2016), no. 4, 794-802.

• E. Lubetzky and A. Sly,

Information percolation and cutoff for the stochastic Ising model,

Journal of the American Mathematical Society (JAMS) 29 (2016), 729–774.

• C. Caputo, E. Lubetzky, F. Martinelli, A. Sly and F.L. Toninelli,

Scaling limit and cube-root fluctuations in SOS surfaces above a wall,

Journal of the European Mathematical Society (JEMS) 18 (2016), no. 5, 931–995.

• E. Lubetzky and J. Steif,

Strong noise sensitivity and random graphs,

Annals of Probability 43 (2015), no. 6, 3239–3278.

• T. Bohman, A. Frieze and E. Lubetzky,

Random triangle removal,

Advances in Mathematics 280 (2015), 379-438.

• E. Lubetzky and A. Sly,

An exposition to information percolation for the Ising model,

Annales de la Faculté des Sciences de Toulouse 29 (2015), no. 4, 745–761.

• E. Lubetzky and Y. Zhao,

On replica symmetry of large deviations in random graphs,

Random Structures and Algorithms 47 (2015), no. 1, 109–146.

• S. Ganguly, E. Lubetzky and F. Martinelli,

Cutoff for the east process,

Communications in Mathematical Physics 335 (2015), no. 3, 1287–1322.

• C. Cooper, A. Frieze and E. Lubetzky,

Cover time of a random graph with given degree sequence II: Allowing vertices of degree two, *Random Structures and Algorithms* 45 (2014), no. 4, 627–674.

• M. Krivelevich, E. Lubetzky and B. Sudakov,

Cores of random graphs are born Hamiltonian,

Proceedings of the London Mathematical Society 109 (2014), no. 1, 161–188.

• E. Lubetzky and A. Sly,

Cutoff for general spin systems with arbitrary boundary conditions,

Communications in Pure and Applied Mathematics 67 (2014), no. 6, 982–1027.

• C. Caputo, E. Lubetzky, F. Martinelli, A. Sly and F.L. Toninelli,

Dynamics of (2+1)D SOS surfaces above a wall: slow mixing induced by entropic repulsion, *Annals of Probability* 42 (2014), no. 4, 1516–1589.

• J. Ding, E. Lubetzky and Y. Peres,

Anatomy of the giant component: The strictly supercritical regime,

European Journal of Combinatorics 35 (2014), 155–168.

• E. Lubetzky and A. Sly,

Cutoff for the Ising model on the lattice,

*Inventiones Mathematicae* 191 (2013), no. 3, 719–755.

• M. Krivelevich, E. Lubetzky and B. Sudakov,

Longest cycles in sparse random digraphs,

Random Structures and Algorithms 43 (2013), no. 1, 1–15.

• E. Lubetzky, F. Martinelli, A. Sly and F.L. Toninelli,

Quasi-polynomial mixing of 2D stochastic Ising model with "plus" boundary up to criticality, *Journal of the European Mathematical Society* 15 (2013), no. 2, 339–386.

• P.-S. Loh and E. Lubetzky,

Stochastic coalescence in logarithmic time,

*Annals of Applied Probability* 23 (2013), no. 2, 492–528.

Preliminary version appeared in the *Proc. of the 23rd ACM-SIAM SODA* (2012), 541–551.

• A. Blasiak, R. Kleinberg and E. Lubetzky,

Broadcasting with side information: bounding and approximating the broadcast rate, *IEEE Transactions on Information Theory* 59 (2013), no. 9, 5811–5823.

• C. Caputo, E. Lubetzky, F. Martinelli, A. Sly and F.L. Toninelli,

The shape of the (2+1)D SOS surface above a wall,

Comptes Rendus Mathematique 350 (2012), 703–706.

• E. Lubetzky and A. Sly,

Critical Ising on the square lattice mixes in polynomial time, *Communications in Mathematical Physics* 313 (2012), no. 3, 815–836.

• J. Ding, E. Lubetzky and Y. Peres,

Mixing time of near-critical random graphs,

Annals of Probability 40 (2012), no. 3, 979–1008.

• P. Cuff, J. Ding, O. Louidor, E. Lubetzky, Y. Peres and A. Sly, Glauber Dynamics for the mean-field Potts Model, *Journal of Statistical Physics* 149 (2012), no. 3, 432–477.

• N. Alon, O. Angel, I. Benjamini and E. Lubetzky, Sums and products along sparse graphs, *Israel Journal of Mathematics* 188 (2012), no. 1, 353–384.

• E. Lubetzky, B. Sudakov and V. Vu, Spectra of lifted Ramanujan graphs, Advances in Mathematics 227 (2011), no. 4, 1612–1645.

• J. Ding, J.H. Kim, E. Lubetzky and Y. Peres, Anatomy of a young giant component in the random graph, *Random Structures and Algorithms* 39 (2011), no. 2, 139–178.

• A. Blasiak, R. Kleinberg and E. Lubetzky, Lexicographic products and the power of non-linear network coding, *Proc. of the 52nd IEEE FOCS* (2011), 609–619.

• A. Azar, O. Gurel-Gurevich, E. Lubetzky and T. Moscibroda, Optimal whitespace synchronization strategies, *European Symposium on Algorithms (ESA)* (2011), 713–722.

• E. Lubetzky and A. Sly, Explicit expanders with cutoff phenomena, Electronic Journal of Probability 16 (2011), 419–435.

• J. Ding, E. Lubetzky and Y. Peres, Mixing time of critical Ising model on trees is polynomial in the height, *Communications in Mathematical Physics* 295 (2010), no. 1, 161–207.

• E. Lubetzky and A. Sly, Cutoff phenomena for random walks on random regular graphs, *Duke Mathematical Journal* 153 (2010), no. 3, 475–510.

• M. Krivelevich, E. Lubetzky and B. Sudakov, Hamiltonicity thresholds in Achlioptas processes, *Random Structures and Algorithms* 37 (2010), no. 1, 1–24.

• J. Ding, J.H. Kim, E. Lubetzky and Y. Peres, Diameters in supercritical random graphs via first passage percolation, *Combinatorics, Probability and Computing* 19 (2010), no. 5–6, 729–751.

• J. Ding, E. Lubetzky and Y. Peres, Total variation cutoff in birth-and-death chains, *Probability Theory and Related Fields* 146 (2010), no. 1, 61–85.

 N. Alon, O. Gurel-Gurevich and E. Lubetzky, Choice-memory tradeoff in allocations, Annals of Applied Probability 20 (2010), no. 4, 1470–1511.
 Preliminary version appeared in the Proc. of the 50th IEEE FOCS (2009), 230–238. • T. Bohman, A. Frieze and E. Lubetzky, Random greedy triangle-packing beyond the 7/4 barrier, *Journal of Combinatorics* 1 (2010), no. 3–4, 477–488.

• G. Amir, O. Gurel-Gurevich, E. Lubetzky, A. Singer, Giant components in biased graph processes, *Indiana University Mathematics Journal*, 59 (2010), no. 6, 1893–1930.

• J. Ding, E. Lubetzky and Y. Peres,

The mixing time evolution of Glauber dynamics for the mean-field Ising model, *Communications in Mathematical Physics* 289 (2009), 725–764.

• N. Alon and E. Lubetzky,

Poisson approximation for non-backtracking random walks, *Israel Journal of Mathematics* 174 (2009), 227–252.

• N. Alon and E. Lubetzky, Uniformly cross intersecting families,

Combinatorica 29 (2009), no. 4, 389–431.

• J. Ding, E. Lubetzky and Y. Peres,

Censored Glauber Dynamics for the mean field Ising Model, *Journal of Statistical Physics* 137 (2009), no. 3, 407–458.

• E. Lubetzky and U. Stav,

Non-linear index coding outperforming the linear optimum, *IEEE Transactions on Information Theory* 55 (2009), 3544–3551. Preliminary version appeared in *Proc. of the 48th IEEE FOCS* (2007), 161–167.

• N. Alon, A. Hasidim, E. Lubetzky, U. Stav and A. Weinstein, Broadcasting with side-information,

Proc. of the 49th IEEE FOCS (2008), 823-832.

• I. Benjamini, S. Haber, M. Krivelevich and E. Lubetzky, The isoperimetric constant of the random graph process, *Random Structures and Algorithms* 32 (2008), 101–114.

N. Alon, I. Benjamini, E. Lubetzky and S. Sodin,
 Non-backtracking random walks mix faster,
 Communications in Contemporary Mathematics 9 (2007), 585–603.

• N. Alon and E. Lubetzky,

Privileged users in zero-error transmission over a noisy channel, *Combinatorica* 27 (2007), 737–743.

• N. Alon and E. Lubetzky,

Graph powers, Delsarte, Hoffman, Ramsey and Shannon, *SIAM J. Discrete Math* 21 (2007), 329–348.

 N. Alon and E. Lubetzky, Codes and Xor graph products,

Combinatorica 27 (2007), 13–33

• N. Alon and E. Lubetzky,

Independent sets in tensor graph powers, *Journal of Graph Theory* 54 (2007), 73–87.

• T. Amiaz, N. Kiryati, E. Lubetzky, Coarse to Over-Fine Optical Flow Estimation, Pattern Recognition 40 (2007), 2496–2503.

- N. Alon and E. Lubetzky,
  - The Shannon capacity of a graph and the independence numbers of its powers, *IEEE Transactions on Information Theory* 52 (2006), 2172–2176.
- Y. Azar, M. Feder, E. Lubetzky, D. Rajwan and N. Shulman, The Multicast Bandwidth Advantage in Serving a Web Site, *Proc. of 3rd NGC* (2001), 88–99.
- P. Caddeo, Y.H. Kim and E. Lubetzky,
  On level line fluctuations of SOS surfaces above a wall, submitted.
- R. Gheissari and E. Lubetzky
   Metastability cascades and prewetting in the SOS model,
   submitted.

# TALKS IN COLLOQUIA / CONFERENCES / WORKSHOPS:

- International Conference on Probability and Stochastic Analysis, Beijing, Oct 2023.
- Graduate Mini-school in Groups, Dynamics, and Probability, Austin, May 2023.
- The 124<sup>th</sup> Statistical Mechanics Conference, Rutgers, Dec 2022.
- IHÉS Conference: "100...(102!) Years of the Ising Model," Paris, June 2022.
- AMS Fall Eastern Sectional Meeting, Penn State University, Oct 2020.
- Workshop: "Combinatorics," Oberwolfach, Jan 2020.
- Workshop: "External and Probabilisitic Combinatorics," Oberwolfach, Apr 2019.
- Workshop: "Advances in Asymptotic Probability," Stanford University, Dec 2018.
- Colloquium: Ohio State University, Mathematics Department, Nov 2018.
- Charles River Lectures, Cambridge, Oct 2018.
- Workshop: "Algorithms and Randomness," Atlanta, May 2018.
- Workshop: "Probabilistic and Extremal Combinatorics," Harvard University, Feb 2018.
- MCA, Probability Theory session, Montreal, Jul 2017.
- MCA, Extremal and Probabilistic Combinatorics session, Montreal, Jul 2017.
- IHÉS mini-course at the Probability Summer School for graduate students, Paris, Jul 2017.
- Workshop: "Dynamics aging and universality," Courant Institute, Jun 2017.
- Workshop: "Phase transitions in rand. computational problems," AIM, San Jose, Jun 2017.
- AMS Spring Central Sectional Meeting, Indiana University, Apr 2017.
- Workshop: "Expanders and Extractors," Simons Foundation, Berkeley, Feb 2017.
- Workshop: "Large Scale Stochastic Dynamics," Oberwolfach, Nov 2016.
- Colloquium: Yale University, Mathematics Department, Sep 2016.
- Workshop: "Markov Chain mixing times," AIM, San Jose, Jun 2016.
- Workshop: "Probabilistic and Extremal Combinatorics," ETH Zurich, May 2016.
- Colloquium: University of Maryland, Mathematics Department, Apr 2016.
- Workshop: "Probabilistic and Extremal Combinatorics," Oberwolfach, Apr 2016.
- Workshop: "Phase Transitions," Simons Foundation, Berkeley, Feb 2016.
- AMS Fall Eastern Sectional Meeting, Probability section, Rutgers, Nov 2015
- AMS Fall Western Sectional Meeting, Fullerton, Oct 2015 (*plenary*).
- The 37th Midwest Probability Colloquium, Chicago, Oct 2015.
- Workshop: "Extremal & Probabilistic Combinatorics," BIRS, Banff, Aug 2015.

- Random Structures & Algorithms, Pittsburgh, Jul 2015 (*plenary*).
- Southeast Probability Seminar, Duke University, May 2015.
- Workshop: "Crystals, quasicrystals and random networks," ICERM, Providence, Feb 2015.
- Workshop: "Discrete Markov chains," IMPA, Rio de Janeiro, Oct 2014.
- Courant–Columbia Probability Seminar Series, Oct 2014.
- Stochastic Processes and Applications (SPA), Buenos Aires, Aug 2014 (plenary).
- The 10<sup>th</sup> Cornell Probability Summer School, Jul 2014 (*invited main course*).
- Workshop: "Phase transitions in discrete structures," Warwick, May 2014.
- Paul Erdős Lecture Series 2014, Memphis, Mar 2014.
- Workshop: "Talking across fields", Toulouse, Mar 2014.
- Colloquium: Harvard University, Applied Mathematics Department, Feb 2014.
- Colloquium: UCLA, Mathematics Department, Jan 2014.
- Workshop: "Extrermal and Probabilistic Combinatorics," Oberwolfach, Jan 2014.
- Workshop: "Discrete Random Geometry," Varbergs, Sweden, Aug 2013.
- Workshop: "Extremal and Probabilistic Combinatorics," IPAM, Los Angeles, Jan 2013.
- Colloquium: Hebrew University, Mathematics Department, Dec 2012.
- Colloquium: Tel Aviv University, Mathematics Department, Dec 2012.
- Colloquium: Technion, Mathematics Department, Dec 2012.
- Workshop: "Discrete Geometric Analysis," RIMS, Kyoto, Aug 2012.
- Workshop: "New Trends & Directions in Combinatorics," BIRS, Banff, Aug 2012.
- Workshop: "Computation and Phase Transitions," Atlanta, Jun 2012.
- Paul Erdős Lecture Series 2012, Memphis, May 2012.
- Colloquium: Stanford University, Mathematics Department, May 2012.
- The 10<sup>th</sup> Northeast Probability Seminar, Courant Institute (NYU), Nov 2011.
- EuroComb 2011, Budapest, Aug 2011 (plenary).
- La-Pietra 2011 conference on Probability, Florence, Jun 2011 (5-lecture mini-course).
- AMS Fall Western Meeting, Combinatorics section, Los Angeles, Oct 2010.
- SIAM Conference on Discrete Math, Austin, Jun 2010.
- Workshop "Probabilistic Techniques and Applications," IPAM, Los Angeles, Oct 2009.
- The 50<sup>th</sup> IEEE Symposium on Foundations of Computer Science (FOCS), Atlanta, Oct 2009.
- ICMP, Probability Theory session, Prague, Aug 2009.
- Workshop: "Extremal and Probabilistic Combinatorics," BIRS, Banff, Aug 2009.
- Workshop: "Combinatorics & Probability," Oberwolfach, Apr 2009.
- Northwest Probability Seminar, Seattle, Nov 2008.
- European Conference on Complex Systems, Jerusalem, Sep 2008.
- Workshop: "Phase Transitions," BIRS, Banff, Jun 2008.
- Workshop: "MCMC Methods," Newton Institute CSM, Cambridge, Mar 2008.
- AMS national meeting, Probability Theory section, San Diego, Jan 2008.
- The 48<sup>th</sup> IEEE Symposium on Foundations of Computer Science (FOCS), Oct 2007.
- AMS Fall Eastern Meeting, Combinatorics & Probability section, Rutgers, Oct 2007.
- Random Structures and Algorithms Conference, Tel Aviv, May 2007.
- Workshop: "Combinatorics, Probability & Computing," Oberwolfach, Oct 2006.