Nima Anari

anari@cs.stanford.edu
+1 (510) 520-7774
https://nimaanari.com

389 Jane Stanford Way, #W248
Stanford, CA 94305

Research Interests

Sampling algorithms and Markov chains

Parallel algorithms

High-dimensional expanders

Geometry of polynomials

Academic Positions

Stanford University . . . . . 9/2019 - present
Assistant Professor of Computer Science.
Robert N. Noyce Faculty Fellow.

Simons Institute for the Theory of Computing . . . . . 1/2019 - 5/2019
Microsoft Research Fellow.

Stanford University . . . . . 1/2018 - 8/2019
Research Engineer in Computer Science.

Simons Institute for the Theory of Computing . . . . . 8/2017 - 12/2017
Research Fellow.

Stanford University . . . . . 1/2016 - 8/2017
Postdoctoral Scholar in Management Science and Engineering, Hosted by Amin Saberi.

Education

University of California, Berkeley . . . . . 8/2010 - 12/2015
Ph.D. in Computer Science.
Advisor: Satish Rao.

Sharif University of Technology . . . . . 9/2006 - 7/2010
B.Sc. in Computer Engineering and B.Sc. in Pure Mathematics.

Honors and Awards

Michael and Sheila Held Prize 2025
National Academy of Sciences

Frontiers of Science Award 2023
International Congress of Basic Science.

Sloan Research Fellowship 2021
Alfred P. Sloan Foundation.

NSF CAREER Award 2021
National Science Foundation.

STOC 2019 Best Paper Award 2019
For the paper "Log-Concave Polynomials II: High-Dimensional Walks and an FPRAS for Counting Bases of a Matroid."

Google Faculty Research Award 2019
Google.

Microsoft Research Fellow 2019
Simons Institute for the Theory of Computing.

Simons-Berkeley Research Fellow 2017
Simons Institute for the Theory of Computing.

Berkeley Fellowship for Graduate Studies . . . . . 2010 - 2012
University of California, Berkeley.

Ranked 14th Team . . . . . ICPC 2009
ACM International Collegiate Programming Contest World Finals.

Ranked 13th Team . . . . . ICPC 2008
ACM International Collegiate Programming Contest World Finals.

First Prize . . . . . IMC 2008
International Mathematics Competition.

First Prize . . . . . IMC 2007
International Mathematics Competition.

Outstanding Student Award 2007, 2008, 2009
Sharif University of Technology.

Silver Medal . . . . . IOI 2006
International Olympiad in Informatics.

Gold Medal . . . . . IMO 2006
International Mathematical Olympiad.

Silver Medal . . . . . IMO 2005
International Mathematical Olympiad.

Teaching

CS 161: Design and Analysis of Algorithms . . . . . Winter 2025
Stanford University.

CS 221: Artificial Intelligence: Principles and Techniques . . . . . Autumn 2024
Stanford University.

CS 221: Artificial Intelligence: Principles and Techniques . . . . . Spring 2024
Stanford University.

CS 161: Design and Analysis of Algorithms . . . . . Winter 2024
Stanford University.

CS 263: Counting and Sampling . . . . . Autumn 2023
Stanford University.

CS 161: Design and Analysis of Algorithms . . . . . Winter 2023
Stanford University.

CS 263: Counting and Sampling . . . . . Autumn 2022
Stanford University.

CS 161: Design and Analysis of Algorithms . . . . . Winter 2022
Stanford University.

CS 221: Artificial Intelligence: Principles and Techniques . . . . . Spring 2021
Stanford University.

CS 161: Design and Analysis of Algorithms . . . . . Winter 2021
Stanford University.

CS 263: Counting and Sampling . . . . . Autumn 2020
Stanford University.

CS 221: Artificial Intelligence: Principles and Techniques . . . . . Spring 2020
Stanford University.

CS 260: Geometry of Polynomials in Algorithm Design . . . . . Winter 2020
Stanford University.

Mentoring

Alireza Haqi . . . . . Ph.D., 2025 - present
Co-advised with Moses Charikar.

Eric Ma . . . . . Ph.D., 2025 - present
Co-advised with Tselil Schramm.

Aniket Das . . . . . Ph.D., 2025 - present
Co-advised with Tselil Schramm.

CJ Chen . . . . . Undergrad, 2024
LINXS Program (Summer Research).

Carlo Baronio . . . . . Undergrad, 2024
CURIS Program (Summer Research).

Chloë Blake . . . . . Undergrad, 2023
LINXS Program (Summer Research).

Thanawat Sornwanee . . . . . Undergrad, 2023
CURIS Program (Summer Research).

Misha Ivkov . . . . . Ph.D., 2022 - present
Co-advised with Tselil Schramm.

Brian Xu . . . . . Undergrad, 2022
CURIS Program (Summer Research).

Katherine Yu . . . . . Undergrad, 2022
CURIS Program (Summer Research).

Yizhi Huang . . . . . Undergrad, 2022
UGVR Program (Summer Research).

Tianyu Liu . . . . . Postdoc, 2022 - 2023
Computing Innovation Fellow.

Frederic Koehler . . . . . Postdoc, 2022 - 2023
Motwani Postdoctoral Fellow. Co-hosted with Omer Reingold and Gregory Valiant.

Callum Burgess . . . . . Undergrad, 2021
CURIS Program (Summer Research).

Nathan Hu . . . . . Undergrad, 2020
CURIS Program (Summer Research).

Armaun Sanayei . . . . . Undergrad, 2020
CURIS Program (Summer Research).

Thuy-Duong (June) Vuong . . . . . Ph.D., 2019 - 2024
Co-advised with Moses Charikar.

Professional Service

Workshop Organizer 3/2025
Co-organized workshop on "The geometry of polynomials in combinatorics and sampling" at the American Institute of Mathematics.

Program Committee Member . . . . . FOCS 2024

Program Committee Member . . . . . ICALP 2024

Program Committee Member . . . . . STOC 2023

Program Committee Member . . . . . ITCS 2021

Program Committee Member . . . . . STOC 2020

Program Committee Member . . . . . RANDOM 2020

Workshop Organizer . . . . . STOC 2019
Co-organized workshop on "Nash Welfare, Market Equilibrium, and Stable Polynomials."

Program Committee Member . . . . . APPROX 2019

Workshop Organizer . . . . . FOCS 2016
Co-organized workshop on "Approximating Traveling Salesman Problems using Algebraic Techniques."

Miscellaneous Jobs

Microsoft Research, Redmond . . . . . 5/2015 - 8/2015
Intern in the Theory Group.

Google, New York . . . . . 5/2014 - 8/2014
Intern in the Algorithms Research Group.

Jane Street, New York . . . . . 5/2013 - 8/2013
Intern.

Facebook, Menlo Park . . . . . 5/2012 - 8/2012
Intern.

D.E. Shaw & Co., New York . . . . . 6/2011 - 8/2011
Intern.

Invited Talks

Yale University 10/2024
Foundations of Data Science Institute conference on "Recent Advances and Future Directions for Sampling."

Cargese Workshop on Combinatorial Optimization 9/2024
Tutorials on the Theme of "Sampling and Counting."

Banff International Research Station 8/2024
Workshop on "Frontiers of Statistical Mechanics and Theoretical Computer Science."

Simons Institute for the Theory of Computing 7/2024
Reunion workshop on "Analysis and TCS."

Northwestern University 3/2024
Department of Mathematics Colloquium.

Stanford University 2/2024
Probability Seminar.

International Congress of Basic Science 7/2023

Simons Institute for the Theory of Computing 6/2023
Workshop on "Beyond the Boolean Cube."

CanaDAM 2023 . . . . . 6/2023
Plenary Speaker.

Harvard University 5/2023
Theory Seminar.

Oberwolfach Research Institute for Mathematics 3/2023
Workshop on “New Directions in Real Algebraic Geometry.”

Banff International Research Station 3/2023
Workshop on “Algebraic Aspects of Matroid Theory.”

Stanford University 1/2023
Combinatorics Seminar.

University of Minnesota and Lehigh University 10/2022
Joint Probability Seminar.

University of California, Santa Barbara 8/2022
Summer School on “New Tools for Optimal Mixing of Markov Chains: Spectral Independence and Entropy Decay.”

Center for Discrete Mathematics and Theoretical Computer Science (DIMACS) 5/2022
Workshop on “Entropy and Optimization.”

University of Cambridge 2/2022
Probability Seminar.

Oberwolfach Research Institute for Mathematics 11/2021
Workshop on “Combinatorial Optimization.”

Simons Foundation, New York 11/2021
Workshop on “High-Dimensional Expanders.”

University of Illinois, Urbana-Champaign 11/2021
Theory Seminar.

STOC 2021 . . . . . 6/2021
Invited Tutorial on “Log-Concave Polynomials.”

Tata Institute of Fundamental Research 1/2021

Workshop on Uniqueness Methods in Statistical Mechanics 12/2020

Institute for Advanced Studies (IAS) 10/2020
Computer Science and Discrete Math Seminar.

Highlights of Algorithms (HALG) 8/2020

Purdue University 4/2020
Theory Seminar.

University of California, Berkeley 3/2020
Theory Seminar.

MIT 1/2020
Workshop on “Learning Under Complex Structure.”

University of California, Los Angeles 11/2019
Combinatorics Seminar.

Georgia Tech 11/2019
Invited Lectures.

Highlights of Algorithms (HALG) 6/2019

Banff International Research Station 5/2019
Workshop on “Geometry of Real Polynomials.”

Simons Institute for the Theory of Computing 5/2019
Workshop on “Hyperbolic Polynomials and Hyperbolic Programming.”

Bay Area Discrete Math Workshop (BADMath) 4/2019

University of California, Berkeley 4/2019
Probability Seminar.

Simons Institute for the Theory of Computing 3/2019
Workshop on “Deterministic Counting, Probability, and Zeros of Partition Functions.”

Simons Institute for the Theory of Computing 2/2019
Workshop on “Beyond Randomized Rounding and the Probabilistic Method.”

University of California, San Diego 1/2019
Theory Seminar.

Simons Institute for the Theory of Computing 1/2019
Workshop on “Geometry of Polynomials Bootcamp.”

Stanford University 11/2018
Probability Seminar.

EPFL 11/2018
Workshop on “Applications of Partition Functions.”

MIT 10/2018
Algorithms and Complexity Seminar.

EPFL 10/2018
Workshop on “Theoretical Challenges in Partition Functions.”

Harvard University 9/2018
Theory of Computing Seminar.

Banff International Research Station 9/2018
Workshop on “The Traveling Salesman Problem: Algorithms & Optimization.”

Georgia Tech 4/2018
ARC Colloquium.

Institute for Pure & Applied Mathematics (IPAM) 4/2018
Workshop on “Expected Characteristic Polynomial Techniques and Applications.”

TCS+ 3/2018

Simons Institute for the Theory of Computing 9/2017
Workshop on “Discrete Optimization via Continuous Relaxation.”

Manuscripts and Working Papers

[49] **Batch Active Learning Using Determinantal Point Processes** . . . . .
Erdem Biyik, Kenneth Wang, Nima Anari, Dorsa Sadigh

CoRR, abs/1906.07975

Publications

[48] **Diffusion Models are Secretly Exchangeable: Parallelizing DDPMs via Auto Speculation** . . . . ICML 2025
Hengyuan Hu, Aniket Das, Dorsa Sadigh, Nima Anari

Forty-second International Conference on Machine Learning, ICML 2025, Vancouver, BC, Canada, July 13-19, 2025

47 **Parallel Sampling via Autospeculation** . . . . . CoRR

Nima Anari, Carlo Baronio, CJ Chen, Alireza Haqi, Frederic Koehler, Anqi Li, Thuy-Duong Vuong

CoRR, abs/2511.07869

46 **Fast parallel sampling under isoperimetry** . . . . . COLT 2024

Nima Anari, Sinho Chewi, Thuy-Duong Vuong

The Thirty Seventh Annual Conference on Learning Theory, June 30 - July 3, 2023, Edmonton, Canada, 247

45 **Parallel Sampling via Counting** . . . . . STOC 2024

Nima Anari, Ruiquan Gao, Aviad Rubinstein

Proceedings of the 56th Annual ACM Symposium on Theory of Computing, STOC 2024, Vancouver, BC, Canada, June 24-28, 2024

44 **Trickle-Down in Localization Schemes and Applications** . . . . . STOC 2024

Nima Anari, Frederic Koehler, Thuy-Duong Vuong

Proceedings of the 56th Annual ACM Symposium on Theory of Computing, STOC 2024, Vancouver, BC, Canada, June 24-28, 2024

43 **Universality of Spectral Independence with Applications to Fast Mixing in Spin Glasses** . . . . SODA 2024

Nima Anari, Vishesh Jain, Frederic Koehler, Huy Tuan Pham, Thuy-Duong Vuong

Proceedings of the 2024 ACM-SIAM Symposium on Discrete Algorithms, SODA 2024, Alexandria, VA, USA, January 7-10, 2024

42 **Batch Active Learning of Reward Functions from Human Preferences** . . . . . J. Hum.-Robot Interact.

Erdem Biyik, Nima Anari, Dorsa Sadigh

J. Hum.-Robot Interact., 13
ACM Trans. Hum. Robot Interact., 13

41 **Log-concave polynomials III: Mason's ultra-log-concavity conjecture for independent sets of matroids** . . . . Proc. Amer. Math. Soc.

Nima Anari, Kuikui Liu, Shayan Oveis Gharan, Cynthia Vinzant

Proc. Amer. Math. Soc., 152

40 **Parallel Sampling of Diffusion Models** . . . . . NeurIPS 2023

Andy Shih, Suneel Belkhale, Stefano Ermon, Dorsa Sadigh, Nima Anari

Advances in Neural Information Processing Systems 36: Annual Conference on Neural Information Processing Systems 2023, NeurIPS 2023, New Orleans, LA, USA, December 10 - 16, 2023

NeurIPS spotlight.

39 **Distortion in metric matching with ordinal preferences** . . . . . EC 2023

Nima Anari, Moses Charikar, Prasanna Ramakrishnan

Proceedings of the 24th ACM Conference on Economics and Computation, EC 2023, London, United Kingdom, July 9-12, 2023

38 **Quadratic Speedups in Parallel Sampling from Determinantal Distributions** . . . . . SPAA 2023

Nima Anari, Callum Burgess, Kevin Tian, Thuy-Duong Vuong

Proceedings of the 35th ACM Symposium on Parallelism in Algorithms and Architectures, SPAA 2023, Orlando, FL, USA, June 17-19, 2023

37 **Parallel Discrete Sampling via Continuous Walks** . . . . . STOC 2023

Nima Anari, Yizhi Huang, Tianyu Liu, Thuy-Duong Vuong, Brian Xu, Katherine Yu

Proceedings of the 55th Annual ACM Symposium on Theory of Computing, STOC 2023, Orlando, FL, USA, June 20-23, 2023

36 **Optimal Sublinear Sampling of Spanning Trees and Determinantal Point Processes via Average-Case Entropic Independence** . . . . FOCS 2022

Nima Anari, Yang P. Liu, Thuy-Duong Vuong

63rd IEEE Annual Symposium on Foundations of Computer Science, FOCS 2022, Denver, CO, USA, October 31 - November 3, 2022
SIAM J. Comput., 54

Invited to special issue of SIAM Journal on Computing.

35 **From Sampling to Optimization on Discrete Domains with Applications to Determinant Maximization** . . . . COLT 2022

Nima Anari, Thuy-Duong Vuong

Conference on Learning Theory, 2-5 July 2022, London, UK, 178

34 **Entropic independence: optimal mixing of down-up random walks** . . . . . STOC 2022

Nima Anari, Vishesh Jain, Frederic Koehler, Huy Tuan Pham, Thuy-Duong Vuong

STOC '22: 54th Annual ACM SIGACT Symposium on Theory of Computing, Rome, Italy, June 20 - 24, 2022

Merged extended abstract of the two papers.

33 **Entropic Independence II: Optimal Sampling and Concentration via Restricted Modified Log-Sobolev Inequalities** . . . . STOC 2022 (merged)

Nima Anari, Vishesh Jain, Frederic Koehler, Huy Tuan Pham, Thuy-Duong Vuong

An extended abstract resulting from a merge with the paper "Entropic Independence I: Modified Log-Sobolev Inequalities for Fractionally Log-Concave Distributions and High-Temperature Ising Models" appeared in STOC 2022.

32 **Entropic Independence I: Modified Log-Sobolev Inequalities for Fractionally Log-Concave Distributions and High-Temperature Ising Models** . . . . STOC 2022 (merged)

Nima Anari, Vishesh Jain, Frederic Koehler, Huy Tuan Pham, Thuy-Duong Vuong

An extended abstract resulting from a merge with the paper "Entropic Independence II: Optimal Sampling and Concentration via Restricted Modified Log-Sobolev Inequalities" appeared in STOC 2022.

31 **Domain Sparsification of Discrete Distributions Using Entropic Independence** . . . . . ITCS 2022

Nima Anari, Michal Derezinski, Thuy-Duong Vuong, Elizabeth Yang

13th Innovations in Theoretical Computer Science Conference, ITCS 2022, January 31 - February 3, 2022, Berkeley, CA, USA, 215

30 **The Bethe and Sinkhorn Permanents of Low Rank Matrices and Implications for Profile Maximum Likelihood** . . . . COLT 2021

Nima Anari, Moses Charikar, Kirankumar Shiragur, Aaron Sidford

Conference on Learning Theory, COLT 2021, 15-19 August 2021, Boulder, Colorado, USA, 134

29 **Sampling Arborescences in Parallel** . . . . . ITCS 2021

Nima Anari, Nathan Hu, Amin Saberi, Aaron Schild

12th Innovations in Theoretical Computer Science Conference, ITCS 2021, January 6-8, 2021, Virtual Conference, 185

28 **Learning Multimodal Rewards from Rankings** . . . . . CoRL 2021

Vivek Myers, Erdem Biyik, Nima Anari, Dorsa Sadigh

Conference on Robot Learning, 8-11 November 2021, London, UK, 164

27 **Fractionally log-concave and sector-stable polynomials: counting planar matchings and more** . . . . STOC 2021

Yeganeh Alimohammadi, Nima Anari, Kirankumar Shiragur, Thuy-Duong Vuong

STOC '21: 53rd Annual ACM SIGACT Symposium on Theory of Computing, Virtual Event, Italy, June 21-25, 2021

26 **Log-concave polynomials IV: approximate exchange, tight mixing times, and near-optimal sampling of forests** . . . . STOC 2021

Nima Anari, Kuikui Liu, Shayan Oveis Gharan, Cynthia Vinzant, Thuy-Duong Vuong

STOC '21: 53rd Annual ACM SIGACT Symposium on Theory of Computing, Virtual Event, Italy, June 21-25, 2021

25 **Matching Is as Easy as the Decision Problem, in the NC Model** . . . . . ITCS 2020

Nima Anari, Vijay V. Vazirani

11th Innovations in Theoretical Computer Science Conference, ITCS 2020, January 12-14, 2020, Seattle, Washington, USA, 151

24 **An Extension of Plücker Relations with Applications to Subdeterminant Maximization** . . . . APPROX 2020

Nima Anari, Thuy-Duong Vuong

Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques, APPROX/RANDOM 2020, August 17-19, 2020, Virtual Conference, 176

23 **Isotropy and Log-Concave Polynomials: Accelerated Sampling and High-Precision Counting of Matroid Bases** . . . . FOCS 2020

Nima Anari, Michal Derezinski

61st IEEE Annual Symposium on Foundations of Computer Science, FOCS 2020, Durham, NC, USA, November 16-19, 2020

22 **Spectral Independence in High-Dimensional Expanders and Applications to the Hard-core Model** .... FOCS 2020

Nima Anari, Kuikui Liu, Shayan Oveis Gharan

61st IEEE Annual Symposium on Foundations of Computer Science, FOCS 2020, Durham, NC, USA, November 16-19, 2020
SIAM J. Comput., 53

Invited to special issue of SIAM Journal on Computing.

21 **Instance Based Approximations to Profile Maximum Likelihood** ..... NeurIPS 2020

Nima Anari, Moses Charikar, Kirankumar Shiragur, Aaron Sidford

Advances in Neural Information Processing Systems 33: Annual Conference on Neural Information Processing Systems 2020, NeurIPS 2020, December 6-12, 2020, virtual

20 **Nearly Optimal Pricing Algorithms for Production Constrained and Laminar Bayesian Selection** .... EC 2019

Nima Anari, Rad Niazadeh, Amin Saberi, Ali Shameli

Proceedings of the 2019 ACM Conference on Economics and Computation, EC 2019, Phoenix, AZ, USA, June 24-28, 2019

19 **Structured Robust Submodular Maximization: Offline and Online Algorithms** ..... AISTATS 2019

Nima Anari, Nika Haghtalab, Seffi Naor, Sebastian Pokutta, Mohit Singh, Alfredo Torrico

The 22nd International Conference on Artificial Intelligence and Statistics, AISTATS 2019, 16-18 April 2019, Naha, Okinawa, Japan, 89
INFORMS J. Comput., 33

18 **A Tight Analysis of Bethe Approximation for Permanent** ..... FOCS 2019

Nima Anari, Alireza Rezaei

60th IEEE Annual Symposium on Foundations of Computer Science, FOCS 2019, Baltimore, Maryland, USA, November 9-12, 2019
SIAM J. Comput., 54

Invited to special issue of SIAM Journal on Computing.

17 **Log-concave polynomials II: high-dimensional walks and an FPRAS for counting bases of a matroid** .... STOC 2019

Nima Anari, Kuikui Liu, Shayan Oveis Gharan, Cynthia Vinzant

Proceedings of the 51st Annual ACM SIGACT Symposium on Theory of Computing, STOC 2019, Phoenix, AZ, USA, June 23-26, 2019
Annals of Mathematics, 199

Invited to Theory of Computing.
Awarded **Best Paper** of STOC 2019.

16 **Log-Concave Polynomials I: Entropy and a Deterministic Approximation Algorithm for Counting Bases of Matroids** . . . . FOCS 2018

Nima Anari, Shayan Oveis Gharan, Cynthia Vinzant

59th IEEE Annual Symposium on Foundations of Computer Science, FOCS 2018, Paris, France, October 7-9, 2018
Duke Mathematical Journal, 170

15 **Planar Graph Perfect Matching Is in NC** . . . . . FOCS 2018

Nima Anari, Vijay V. Vazirani

59th IEEE Annual Symposium on Foundations of Computer Science, FOCS 2018, Paris, France, October 7-9, 2018
J. ACM, 67

Invited to special issue of SIAM Journal on Computing.

14 **Graph Clustering using Effective Resistance** . . . . . ITCS 2018

Vedat Levi Alev, Nima Anari, Lap Chi Lau, Shayan Oveis Gharan

9th Innovations in Theoretical Computer Science Conference, ITCS 2018, January 11-14, 2018, Cambridge, MA, USA, 94

13 **Smoothed Analysis of Discrete Tensor Decomposition and Assemblies of Neurons** . . . . . NeurIPS 2018

Nima Anari, Constantinos Daskalakis, Wolfgang Maass, Christos H. Papadimitriou, Amin Saberi, Santosh S. Vempala

Advances in Neural Information Processing Systems 31: Annual Conference on Neural Information Processing Systems 2018, NeurIPS 2018, December 3-8, 2018, Montréal, Canada

12 **Budget Feasible Procurement Auctions** . . . . . Oper. Res.

Nima Anari, Gagan Goel, Afshin Nikzad

Oper. Res., 66

Invited to GEB special issue on Algorithmic Game Theory.

11 **Approximating the Largest Root and Applications to Interlacing Families** . . . . . SODA 2018

Nima Anari, Shayan Oveis Gharan, Amin Saberi, Nikhil Srivastava

Proceedings of the Twenty-Ninth Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2018, New Orleans, LA, USA, January 7-10, 2018

10 **Nash Social Welfare for Indivisible Items under Separable, Piecewise-Linear Concave Utilities** . . . . SODA 2018

Nima Anari, Tung Mai, Shayan Oveis Gharan, Vijay V. Vazirani

Proceedings of the Twenty-Ninth Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2018, New Orleans, LA, USA, January 7-10, 2018

9 **Simply Exponential Approximation of the Permanent of Positive Semidefinite Matrices** . . . . FOCS 2017

Nima Anari, Leonid Gurvits, Shayan Oveis Gharan, Amin Saberi

58th IEEE Annual Symposium on Foundations of Computer Science, FOCS 2017, Berkeley, CA, USA, October 15-17, 2017

8 **Nash Social Welfare, Matrix Permanent, and Stable Polynomials** . . . . . ITCS 2017

Nima Anari, Shayan Oveis Gharan, Amin Saberi, Mohit Singh

8th Innovations in Theoretical Computer Science Conference, ITCS 2017, January 9-11, 2017, Berkeley, CA, USA, 67

Elevated to invited paper.

7 **A generalization of permanent inequalities and applications in counting and optimization** . . . . STOC 2017

Nima Anari, Shayan Oveis Gharan

Proceedings of the 49th Annual ACM SIGACT Symposium on Theory of Computing, STOC 2017, Montreal, QC, Canada, June 19-23, 2017
Advances in Mathematics, 383

6 **Monte Carlo Markov Chain Algorithms for Sampling Strongly Rayleigh Distributions and Determinantal Point Processes** . . . . COLT 2016

Nima Anari, Shayan Oveis Gharan, Alireza Rezaei

Proceedings of the 29th Conference on Learning Theory, COLT 2016, New York, USA, June 23-26, 2016, 49

5 **Effective-Resistance-Reducing Flows, Spectrally Thin Trees, and Asymmetric TSP** . . . . . FOCS 2015

Nima Anari, Shayan Oveis Gharan

IEEE 56th Annual Symposium on Foundations of Computer Science, FOCS 2015, Berkeley, CA, USA, 17-20 October, 2015

Invited to special issue of SIAM Journal on Computing.

4 **The Kadison-Singer Problem for Strongly Rayleigh Measures and Applications to Asymmetric TSP** . . . . FOCS 2015 (merged)

Nima Anari, Shayan Oveis Gharan

Companion to the paper “Effective-Resistance-Reducing Flows, Spectrally Thin Trees, and Asymmetric TSP”.

3 **Mechanism Design for Crowdsourcing: An Optimal 1-1/e Competitive Budget-Feasible Mechanism for Large Markets** . . . . FOCS 2014

Nima Anari, Gagan Goel, Afshin Nikzad

55th IEEE Annual Symposium on Foundations of Computer Science, FOCS 2014, Philadelphia, PA, USA, October 18-21, 2014

2 **Euclidean Movement Minimization** . . . . . CCCG 2011

MohammadAmin Fazli, MohammadAli Safari, Nima Anari, Pooya Jalaly Khalilabadi, Mohammad Ghodsi

Proceedings of the 23rd Annual Canadian Conference on Computational Geometry, Toronto, Ontario, Canada, August 10-12, 2011
J. Comb. Optim., 32

1 **Equilibrium Pricing with Positive Externalities** . . . . . WINE 2010

Nima Anari, Shayan Ehsani, Mohammad Ghodsi, Nima Haghpanah, Nicole Immorlica, Hamid Mahini, Vahab S. Mirrokni

Internet and Network Economics - 6th International Workshop, WINE 2010, Stanford, CA, USA, December 13-17, 2010. Proceedings, 6484
Theor. Comput. Sci., 476