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## CONTACT INFORMATION

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Academic profiles:     

## ACADEMIC POSITIONS

**Oxford University**, Oxford, UK (2023–)  
Postdoctoral Research Associate, hosted by Prof. Peter Keevash  
**Carnegie Mellon University**, Pittsburgh PA, USA (2021–2023)  
Postdoctoral Associate

## EDUCATION

**Tel Aviv University**, Israel (2021) PhD, Pure Mathematics  

- Title of thesis: *Random Graphs, Spanning Trees and Related Topics*
- Supervisors: Prof. Michael Krivelevich and Prof. Asaf Nachmias

**Tel Aviv University**, Israel (2016) MSc, Pure Mathematics, *magna cum laude*  

- Title of thesis: *The Trace of Random Walks on Random Graphs*
- Supervisor: Prof. Michael Krivelevich

**Tel Aviv University**, Israel (2011) BSc, Pure Mathematics, *magna cum laude*  

- Three semesters were studied at **The Open University of Israel**

## PROFESSIONAL EXPERIENCE

**Palgo Alpha Technology LTD** (2011–2014) Financial Mathematician  

- Modelling and predicting financial markets
- Developing trading algorithms

## PUBLICATIONS

(Authors are listed in alphabetical order)

- [1] Alan Frieze, Michael Krivelevich, Peleg Michaeli and Ron Peled, *On the trace of random walks on random graphs*, Proceedings of the London Mathematical Society (3) **116** (2018), no. 4, 847–877. Zbl [1386.05181](#), MR[3789834](#)
- [2] Michael Krivelevich and Peleg Michaeli, *Small subgraphs in the trace of a random walk*, Electronic Journal of Combinatorics **24** (2017), no. 1, Paper 1.28, 22. Zbl [1355.05232](#), MR[3625905](#)
- [3] Michael Krivelevich, Tamás Mészáros, Peleg Michaeli and Clara Shikhelman, *Greedy maximal independent sets via local limits*, 31th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2020), pp. 20:1–20:19. To appear in “Random Structures & Algorithms”. Zbl [07651059](#), MR[4116413](#)
- [4] Michael Anastos, Peleg Michaeli and Samantha Petti, *Thresholds in Random Motif Graphs*, Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques (APPROX/RANDOM 2019), 2019, pp. 66:1–66:19. Zbl [07650133](#), MR[4012716](#)

- [5] Peleg Michaeli, Asaf Nachmias and Matan Shalev, *The diameter of uniform spanning trees in high dimensions*, Probability Theory and Related Fields **179** (2021), no. 1-2, 261–294. Zbl [1460.05057](#), MR[4221658](#)
- [6] Lior Gishboliner, Michael Krivelevich and Peleg Michaeli, *Color-biased Hamilton cycles in random graphs*, Random Structures & Algorithms **60** (2022), no. 3, 289–307. Zbl [1522.05262](#), MR[4388697](#)
- [7] Yahav Alon, Michael Krivelevich and Peleg Michaeli, *Spanning trees at the connectivity threshold*, SIAM Journal on Discrete Mathematics **36** (2022), no. 3, 1612–1626. Zbl [1493.05170](#), MR[4450290](#)
- [8] Lior Gishboliner, Michael Krivelevich and Peleg Michaeli, *Discrepancies of spanning trees and Hamilton cycles*, Journal of Combinatorial Theory. Series B **154** (2022), 262–291. Zbl [1483.05088](#), MR[4374842](#)
- [9] Lior Gishboliner, Michael Krivelevich and Peleg Michaeli, *Oriented discrepancy of Hamilton cycles*, Journal of Graph Theory **103** (2023), no. 4, 780–792. Zbl [7747702](#), MR[4606422](#)
- [10] Alan Frieze, Michael Krivelevich and Peleg Michaeli, *Fast construction on a restricted budget*, arXiv e-prints (July 2022). [arXiv:2207.07251](#)
- [11] Alan Frieze and Peleg Michaeli, *Karp’s patching algorithm on random perturbations of dense digraphs*, arXiv e-prints (September 2022). [arXiv:2209.06279](#)
- [12] Tarun Krishna, Peleg Michaeli, Michail Sarantis, Fenglin Wang and Yiqing Wang, *Discrepancies of subtrees*, arXiv e-prints (February 2023). To appear in “Graphs and Combinatorial Optimization: from Theory to Applications”. [arXiv:2302.08557](#)
- [13] Michael Krivelevich, Alan Lew and Peleg Michaeli, *Rigid partitions: from high connectivity to random graphs*, arXiv e-prints (November 2023). [arXiv:2311.14451](#)

#### AWARDS

- Fondation Sciences Mathématiques de Paris postdoctoral fellowship** (2021; declined)  
LPSM, Sorbonne
- Rector’s List for excellence in teaching** (twice) Tel Aviv University
- School of mathematics award for excellence** (2016) Tel Aviv University
- Eljoseph Award for excellence in teaching** (2011) Tel Aviv University
- School of mathematics award for excellence** (2010) Tel Aviv University
- President Award** (2008) The Open University of Israel
- Dean’s List, Faculty of Exact Sciences** (2007) Tel Aviv University

#### TALKS

- July 2023** *Rigid partitions*, [invited talk](#), Combinatorics Day at TAU, Tel Aviv University, Israel
- June 2023** *Fast construction on a restricted budget*, The 21th International Conference on Random Structures and Algorithms (RSA 2023), Pittsburgh PA, USA
- June 2023** *Fast construction on a restricted budget*, [invited minisymposia](#): *Random Structures and Random Processes*, Canadian Discrete and Algorithmic Mathematics (CanaDAM 2023), Winnipeg MB, Canada
- March 2023** *Constructing quickly and on a restricted budget*, Algorithms, Combinatorics and Optimization Research Network (ACORN) Meeting 2023, Georgia Tech, Atlanta GA, USA
- February 2023** *Fast construction on a restricted budget*, Probability and Dynamics seminar, University of Victoria, Canada
- August 2022** *Oriented discrepancy of Hamilton cycles*, The 20th International Conference on Random Structures and Algorithms (RSA 2021-22), Instytut Kultury Europejskiej, Gniezno, Poland

- June 2022** *Oriented discrepancy of Hamilton cycles*, SIAM Conference on Discrete Mathematics (DM22), Carnegie Mellon University, Pittsburgh PA, USA
- March 2022** *Greedy maximal independent sets via local limit*, Combinatorics, Physics and Probability Seminar, Center of Mathematical Sciences and Applications, Harvard University, Cambridge MA, USA
- December 2021** *Greedy maximal independent sets via local limits*, UBC Probability Seminar, University of British Columbia, Vancouver, Canada
- November 2021** *Greedy maximal independent sets via local limits*, ACO Seminar, Carnegie Mellon University, Pittsburgh PA, USA
- November 2021** *Discrepancies of spanning trees*, PhD Seminar on Combinatorics, Games and Optimisation, London School of Economics, UK
- September 2021** *Discrepancies of spanning trees*, ALADDIN lunch, Carnegie Mellon University, Pittsburgh PA, USA
- July 2021** *Discrepancies of spanning trees*, 28th British Combinatorial Conference (BCC 2021), Durham University, UK
- May 2021** *Discrepancies of spanning trees*, Research Seminar in Combinatorics, Tel Aviv University, Israel
- April 2021** *Discrepancies of spanning trees*, Research Seminar in Combinatorics, Freie Universität Berlin, Germany
- September 2020** *Greedy maximal independent sets via local limits*, The 31th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2020)
- September 2020** *Greedy maximal independent sets via local limits*, Probabilistic Combinatorics Online 2020, Moscow Institute of Physics and Technology (MIPT), Russia
- May 2020** *Greedy maximal independent sets via local limits*, Warwick Combinatorics Seminar, The University of Warwick, UK
- March 2020** *Greedy maximal independent sets via local limits*, FUB–TAU Workshop on Ramsey Theory, Tel Aviv University, Israel
- December 2019** *Greedy maximal independent sets via local limits*, Bar-Ilan Combinatorics Seminar, Bar-Ilan University, Ramat Gan, Israel
- July 2019** *Greedy maximal independent sets via local limits*, Workshop on Local Algorithms (WOLA 2019), ETH Zürich, Switzerland
- July 2019** *The diameter of uniform spanning trees*, The 19th International Conference on Random Structures and Algorithms (RSA 2019), ETH Zürich, Switzerland
- June 2018** *Symbolic discrete random variables*, Sage Days 94, Universidad de Zaragoza, Spain
- June 2018** *On the trace of random walks on random graphs*, The 40th Conference on Stochastic Processes and their Applications (SPA 2018), Chalmers University, Göteborg, Sweden
- August 2017** *On the trace of random walks on random graphs*, The 18th International Conference on Random Structures and Algorithms (RSA 2017), Instytut Kultury Europejskiej, Gniezno, Poland
- May 2017** *On the trace of random walks on random graphs*, Probability seminar, Technion, Israel
- May 2017** *Small subgraphs in the trace of a random walk*, Students Probability Day VI, Weizmann Institute of Science, Israel
- May 2016** *On the trace of random walks on random graphs*, Research Seminar in Combinatorics, Tel Aviv University, Israel
- February 2016** *The trace of random walks on random graphs*, TAU–FUB Workshop on Positional Games, Freie Universität Berlin, Germany

**May 2015** *The trace of random walks on random graphs*, Students Probability Day V, Weizmann Institute of Science, Israel

#### UNDERGRADUATE RESEARCH SUPERVISED

**2022** *Discrepancy of Hamilton cycles in dense graphs*, CMU “Summer Undergraduate Research Fellowships” (SURF), Tony Yu

**2022** *Discrepancies of Trees*, CMU “Summer Experiences in Mathematical Sciences” (SEMS), Tarun Krishna, Fenglin Wang and Yiqing Wang, resulted in a coauthored paper

#### RESEARCH INTERESTS

- Random graph processes
- Random trees
- Extremal graph theory

#### TEACHING EXPERIENCE

- Lecturer, *Linear Algebra*, 4 semesters
- Lecturer, *Combinatorics*, 4 semesters
- Lecturer, *Calculus*, 13 semesters
- Instructor, *Probability*, 1 semester
- Lecturer, *Math Refresher Workshop*, 2 semesters
- Tutor, *Gifted Young Students Program*, 2 years
- Instructor, *Set Theory*, 4 semesters

#### PROFESSIONAL SERVICE

- Referee for *Annales de l'Institut Henri Poincaré*, *European Journal of Combinatorics*, *Random Structures & Algorithms*, *The Electronic Journal of Combinatorics*, *The Journal of Graph Theory*, and *The Journal of Combinatorial Theory, Series B*
- Chairman of the Junior Staff Association at Tel Aviv University

#### OTHER ACTIVITIES

**August 2018** TAU–FUB Research Workshop on Graph and Hypergraph Coloring, Freie Universität Berlin, Germany

**July 2017** Spectral properties of large random objects, Institut des Hautes Études Scientifiques, France

**March 2017** FUB–TAU Research Workshop on Graph and Hypergraph Coloring, Tel Aviv University, Israel

**February 2017** Recent trends in the study of expanders and high dimensional expanders, Weizmann Institute of Science, Israel

**November 2016** Sage Days 79, The Hebrew University of Jerusalem, Israel

**August 2016** Hungarian–Israeli combinatorial days, Technion, Israel

**July 2016** High dimensional expanders, inverse theorems and PCPs, Weizmann Institute of Science, Israel

**June 2016** Annual Meeting of the Israel Mathematical Union

**January 2016** Combinatorics: Challenges and Applications, Tel Aviv University, Israel

**August 2015** Mostly Markov Mixing (Summer Workshop), Technion, Israel

**May 2015** Annual Meeting of the Israel Mathematical Union

**March 2015** FUB-TAU Workshop on Positional Games and Extremal Combinatorics, Tel Aviv University, Israel

**January 2015** The 18th Midrasha Mathematicae – In and Around Combinatorics, The Israel Institute for Advanced Studies, The Hebrew University of Jerusalem, Israel