

Peleg Michaeli

Curriculum vitae

Mathematical Institute

University of Oxford

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Academic profiles: [arXiv](#) | [DBLP](#) | [ORCID](#) | [Google Scholar](#) | [Semantic Scholar](#)

Academic positions

- 2023– **University of Oxford, Oxford, UK**
Nicholas Kurti Junior Research Fellow, Brasenose College (2025–)
Marie Skłodowska–Curie Postdoctoral Fellow (2025–2027)
Postdoctoral Research Associate, hosted by Prof. Peter Keevash (2023–)
- 2021–2023 **Carnegie Mellon University, Pittsburgh PA, USA**
Postdoctoral Associate

Education

- 2021 **Tel Aviv University, Israel — PhD in Pure Mathematics**
Title of thesis: *Random Graphs, Spanning Trees and Related Topics*
Supervisors: Prof. Michael Krivelevich and Prof. Asaf Nachmias
- 2016 **Tel Aviv University, Israel — MSc in Pure Mathematics, magna cum laude**
Title of thesis: *The Trace of Random Walks on Random Graphs*
Supervisor: Prof. Michael Krivelevich
- 2011 **Tel Aviv University, Israel — BSc in Pure Mathematics, magna cum laude**
Three semesters were studied at the Open University of Israel

Industry experience

- 2011–2014 **Palgo Alpha Technology LTD — Financial Mathematician**
Developed and implemented models and algorithms for financial market predictions, applying skills in stochastic processes and data analysis

Publications

Authors are listed alphabetically.

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, MR3789834.
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, MR3625905.
3. Michael Krivelevich, Tamás Mészáros, Peleg Michaeli and Clara Shikhelman. *Greedy maximal independent sets via local limits*, *31st International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2020)*, pp. 20:1–20:19; extended abstract. Zbl 07651059, MR4116413.
3. Michael Krivelevich, Tamás Mészáros, Peleg Michaeli and Clara Shikhelman. *Greedy maximal independent sets via local limits*, *Random Structures & Algorithms* 64 (2024), no. 4, 986–1015. Zbl 1539.05140, MR4758151.
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, MR4012716.
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, MR4221658.
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, MR4388697.

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, MR4450290.
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, MR4374842.
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, MR4606422.
10. Alan Frieze, Michael Krivelevich and Peleg Michaeli. *Fast construction on a restricted budget*, *Random Structures & Algorithms* 67 (2025), no. 4, e70031. Zbl 08145674, MR4994833.
11. Tarun Krishna, Peleg Michaeli, Michail Sarantis, Fenglin Wang and Yiqing Wang. *Discrepancies of Subtrees*, *Graphs and combinatorial optimization: from theory to applications*, 2024, pp. 81–93. Zbl 08122506, MR4738424.
12. Michael Krivelevich, Alan Lew and Peleg Michaeli. *Rigid partitions: from high connectivity to random graphs*, *Journal of Combinatorial Theory, Series B* 175 (2025), 126–170. Zbl 08093406, MR4933733.
13. Michael Krivelevich, Alan Lew and Peleg Michaeli. *Minimum degree conditions for graph rigidity*, *Bulletin of the London Mathematical Society* 58 (2026), no. 1, Paper No. e70279. Zbl 08154525, MR5019889.
14. Lior Gishboliner, Stefan Glock, Peleg Michaeli and Amedeo Sgueglia. *Defect and transference versions of the Alon–Frankl–Lovász theorem*, *Combinatorics, Probability and Computing* 35 (2026), no. 4, 542–553.
15. Peter Keevash and Peleg Michaeli. *A generalised Ramsey–Turán problem for matchings*, arXiv e-prints (September 2025). arXiv:2509.10679.
16. Michael Krivelevich, Alan Lew and Peleg Michaeli. *Combinatorial sufficient conditions for graph rigidity and applications to random graphs*, arXiv e-prints (February 2026). arXiv:2602.23713.
17. Peter Keevash and Peleg Michaeli. *A very robust Ramsey theorem for matchings*, arXiv e-prints (March 2026). arXiv:2603.03139.
18. Michael Krivelevich, Alan Lew and Peleg Michaeli. *Rigidity of expanders and pseudorandom graphs*, arXiv e-prints (August 2026). arXiv:2608.21058.
19. John Haslegrave, Peleg Michaeli and Anthony Nixon. *Rigidity of complements of bounded-degree graphs*, arXiv e-prints (September 2026). arXiv:2609.05058.

Awards

- Nicholas Kurti Junior Research Fellowship (JRF) (2025–), Brasenose College, University of Oxford.
- Marie Skłodowska–Curie Actions (MSCA) Postdoctoral Fellowship, UKRI Horizon Europe Guarantee (awarded 2023; tenure 2025–2027), University of Oxford.
- Fondation Sciences Mathématiques de Paris postdoctoral fellowship, (2021; declined), Laboratoire de Probabilités, Statistique et Modélisation (LPSM), Sorbonne.
- Rector’s List for excellence in teaching, Tel Aviv University (twice).
- 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.

Selected recent talks

July 2026	<i>A very robust Ramsey theorem for matchings</i> , 31st British Combinatorial Conference (BCC 2026), Cardiff University, UK
February 2026	<i>Extremal and probabilistic aspects of graph rigidity</i> , Bristol Combinatorics Seminar, University of Bristol, UK
December 2025	<i>Ramsey–Turán problems for matchings</i> , invited talk , Combinatorial Morning in Tel Aviv, Tel Aviv University, Israel
September 2025	<i>Monochromatic matchings in almost-complete and random hypergraphs</i> , invited minisymposia: Probabilistic Methods and Random Graphs , 10th Cracow Conference on Graph Theory, AGH University of Kraków, Poland
August 2025	<i>Monochromatic matchings in almost-complete and random hypergraphs</i> , The 22nd Interna-

July 2024	tional Conference on Random Structures and Algorithms (RSA 2025), TU Wien, Austria <i>Minimum degree conditions for graph rigidity</i> , 30th British Combinatorial Conference (BCC 2024), Queen Mary University of London, UK
March 2024	<i>Rigid partitions</i> , invited talk , Probability and Combinatorics: Eighteenth Annual Workshop, McGill University's Bellairs Institute, Holetown, Barbados
October 2023	<i>Competitive analysis in random graph processes</i> , Combinatorial Theory Seminar, University of Oxford, UK
July 2023	<i>Rigid partitions</i> , invited talk , Combinatorics Day at TAU, Tel Aviv University, Israel
June 2023	<i>Fast construction on a restricted budget</i> , The 21th International Conference on Random Structures and Algorithms (RSA 2023), Pittsburgh PA, USA
June 2023	<i>Fast construction on a restricted budget</i> , invited minisymposia: Random Structures and Random Processes , Canadian Discrete and Algorithmic Mathematics (CanaDAM 2023), Winnipeg MB, Canada
March 2023	<i>Constructing quickly and on a restricted budget</i> , Algorithms, Combinatorics and Optimization Research Network (ACORN) Meeting 2023, Georgia Tech, Atlanta GA, USA
August 2022	<i>Oriented discrepancy of Hamilton cycles</i> , The 20th International Conference on Random Structures and Algorithms (RSA 2021-22), Instytut Kultury Europejskiej, Gniezno, Poland
June 2022	<i>Oriented discrepancy of Hamilton cycles</i> , SIAM Conference on Discrete Mathematics (DM22), Carnegie Mellon University, Pittsburgh PA, USA
March 2022	<i>Greedy maximal independent sets via local limits</i> , Combinatorics, Physics and Probability Seminar, Center of Mathematical Sciences and Applications, Harvard University, Cambridge MA, USA
July 2021	<i>Discrepancies of spanning trees</i> , 28th British Combinatorial Conference (BCC 2021), Durham University, UK

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

Teaching experience

- Tutor, *Graph Theory*, 1 term
- 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*, *Combinatorics*, *Probability & Computing*, *Computer Science Review*, *Discrete Applied Mathematics*, *Discrete Mathematics*, *The Electronic Journal of Combinatorics*, *European Journal of Combinatorics*, *Fields Institute Communications*, *The Journal of Combinatorial Theory, Series B*, *The Journal of Graph Theory*, *Random Structures & Algorithms*, and *SIAM Journal on Discrete Mathematics*.
- Treasurer (2017–2020) and Chairman (2020–2021) of the Junior Staff Association at Tel Aviv University.