Ivan Levcovitz | Curriculum Vitae

Department of Mathematics, Tufts University
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Employment

Tufts University — **Boston**
Norbert Wiener Assistant Professor — *2021–*

Technion - Israel Institute of Technology — **Haifa, Israel**
Postdoctoral Fellow — *2018–2021*
Host: Michah Sageev

Education

CUNY Graduate Center — **New York City**
Ph.D. in Mathematics — *2018*
Advisor: Jason Behrstock

University of Pennsylvania — **Philadelphia**
BSE dual major in Mathematics and Electrical Engineering — *2011*
Magna Cum Laude

Research Interests

Geometric group theory and low-dimensional topology

Publications/Preprints

1. *Non-quasiconvex subgroups of hyperbolic groups via Stallings-like techniques*, with Pallavi Dani
   Journal of Combinatorial Algebra, Vol 5, Issue 3m 237–295, (2021)
2. *Planar lattice subsets with minimal vertex boundary*, with Radhika Gupta, Alexander Margolis and Emily Stark
   Electronic Journal of Combinatorics, Vol 28, Issue 3 (2021)
3. *Comparing the Roller and B(X) boundaries of CAT(0) cube complexes*
   Israel Journal of Mathematics, Vol 242, Issue 1, 129–170, (2021)
4. *Thick groups have trivial Floyd boundary*
   Proceedings of the AMS, Vol 148, Issue 2, 513–521 (2020)
5. *A quasi-isometry invariant and thickness bounds for right-angled Coxeter groups*
   Groups, Geometry and Dynamics, Vol 13, Issue 1, 349–378 (2019)
6. *Divergence of CAT(0) cube complexes and Coxeter groups*
   Algebraic & Geometric Topology, Vol 18 (2018) 1633–1673
7. *Characterizing divergence and thickness in right-angled Coxeter groups*
   Submitted, arXiv:2007.13796

8. *Subgroups of right-angled Coxeter groups via Stallings-like techniques*, with Pallavi Dani
   Submitted, arXiv:1908.09046
9. *Right-angled Artin subgroups of right-angled Coxeter and Artin groups*, with Pallavi Dani
   Submitted, arXiv:2003.05531

Awards, Honors and Grants

Mina Reese Dissertation Fellowship	2016–2017
Doctoral Student Research Grant	2015–2016
Graduate Assistant Science Fellowship	2011–2013
University of Pennsylvania Engineering Exceptional Service Award	2011

Selected Seminar Talks

University of Münster, Professor Linus Kramer's working group seminar	2021
Weizmann Institute, Midrasha on Groups Seminar	2020
CUNY Graduate Center, Geometry and Topology Seminar	2020
Queens University, Dynamics, Geometry and Groups Seminar	2020
Brandeis University, Topology Seminar	2020
Tufts University, Geometric Group Theory Seminar	2019
CUNY Graduate Center, Geometry and Topology Seminar	2019
Temple University, Geometry and Topology Seminar	2019
Haifa University, Geometry and Topology Seminar	2018
Technion - Israel Institute of Technology, Geometry and Topology Seminar	2018
Vanderbilt University, Topology & Group Theory Seminar	2018
University of Texas at Austin, Topology Seminar	2018
Louisiana State University, Topology Seminar	2018
CUNY Graduate Center, Geometry and Topology Seminar	2018
Ohio State University, Geometric Group Theory Seminar	2017
Temple University, Geometry and Topology Seminar	2017
CUNY Graduate Center, Hyperbolic Geometry Seminar (four talks)	2017
CUNY Graduate Center, Geometry and Topology Seminar	2016

Selected Conference Talks

Virtual Geometric Group Theory Conference, CIRM	2020
GAGTA, Bar Ilan University	2019
Aspects of Non-Pos./Neg. Curvature in Group Theory (lightning talk), CIRM	2019
Quasi-isometries and groups: rigidity and classification (lightning talk), Ventotene, Italy	2019

AMS Sectional Meeting, Boundaries and Non-pos. Curvature, Vanderbilt 2018

Geometric Groups on the Gulf Coast (G^3), Pensacola Beach 2017

Spring Topology and Dynamical Systems Conference, NJCU 2017

Tech Topology Conference, Georgia Institute of Technology 2016

Topology Student Workshop, Georgia Institute of Technology 2016

Teaching

Technion - Israel Institute of Technology
Co-organized and co-led summer research projects for undergraduates *2019, 2020*

- Fibered 3–manifolds, Summer 2020
- Quasi-isometries of trees and infinite ended spaces, Summer 2019

Hunter College
Instructor *2018*

- Calculus II, Spring 2018
- Matrix Algebra, Spring 2018

Baruch College
Instructor *2013–2015, 2017*

- Applied Calculus and Matrix Algebra (two sections), Fall 2017
- Applied Calculus, Spring 2015
- Precalculus and Elements of Calculus (two sections), Fall 2014
- Applied Calculus and Matrix Algebra, Spring 2014
- Applied Calculus and Matrix Algebra (two sections), Fall 2013

Other Appointments

Quantitative Reasoning Fellow
at Hunter College *2015–2016*
Programmed Python software, analyzed student data and developed quantitative reasoning activities.

Research Assistant
at University of Pennsylvania, under Robert Ghrist *Summer 2010*
Researched topological methods applied to sensor networks and simulated such networks in Java.

Service Activities

Organizer: Technion seminar on Thurston's hyperbolization theorem

Co-organizer and co-leader: Technion summer research project for undergraduates (two summers)

Referee: for NYJM, Random Structures and Algorithms, Pacific Journal of Math

Reviewer: for MathScinet

Invite Speaker: Tufts TAMID data science club

Miscellaneous

Technical: Python, C, PHP, HTML, CSS, SQL, JavaScript, familiar with Linux, Electrical engineering

lab experience including circuits and microcontrollers

Languages: English (native), Portuguese (native), Spanish (proficient), Hebrew (learning)

Citizenship

United States and **Brazil** dual citizen