Department of Mathematics jason.behrstock@gmail.com
Lehman College CUNY http://comet.lehman.cuny.edu/behrstock
250 Bedford Park Blvd
Bronx, NY 10468

Research Interest

Geometric group theory

Low dimensional geometry, topology, and dynamics

Geometry of non-positively curved spaces

Mapping class groups and Teichmüller space

Probabilistic combinatorics (esp. random graphs)

Education

Ph.D. in Mathematics, State University of New York at Stony Brook, May 2004. Thesis Advisor: Yair Minsky

B.A. in Mathematics (with Honors), University of California at Berkeley, May 1998.

Appointments

Professor of Mathematics (With Tenure) Lehman College, CUNY	September 2018 – Present
Research Scholar (Simons Fellow) Barnard College, Columbia University	January 2022 – December 2022
Associate Professor of Mathematics (With Tenure) Lehman College, CUNY	January 2012 – August 2018
Research Member Mathematical Sciences Research Institute	August 2016 – December 2016
Research Scholar (Simons Fellow) Barnard College, Columbia University	September 2014 – August 2015
Assistant Professor of Mathematics Lehman College, CUNY	September 2008–December 2011
Doctoral Faculty Graduate Center, CUNY	May 2010–Present
Ritt Assistant Professor of Mathematics Columbia University	July 2007–August 2008
Postdoctoral General Member Mathematical Science Research Institute	August 2007–December 2007
Assistant Professor of Mathematics University of Utah	July 2005–June 2007
Assistant Professor of Mathematics Barnard College, Columbia University	July 2004–June 2005

Awards, Honors, and Grants

Simons Fellow in Mathematics (twice).

Fellow of the American Mathematical Society, inaugural class.

Alfred P. Sloan Research Fellowship.

Invited Plenary lecture to the American Mathematical Society.

Lehman College Faculty Recognition Award for Excellence in Research.

NSF research grants PI: DMS-0604524, DMS-0812513, DMS-1006219, DMS-1710890.

NSF grants: one CBMS-NSF conference & numerous other conferences.

Feliks Gross Endowment Award for Outstanding Scholarly Achievement, CUNY Academy for the Humanities and Sciences.

PSC-CUNY research grants PI: 60051-39 40, 63089-00 41.

NSF grant co-PI: DMS-0501702, conference support.

Dorothy Pieper Merit Award for Outstanding Entering Doctoral Students.

Publications & Preprints

1. Asymptotic geometry of the mapping class group and Teichmüller Space.
   SUNY Stony Brook Ph.D Dissertation.

2. Asymptotic geometry of the mapping class group and Teichmüller Space.
   Geometry & Topology, vol. 10 (2006) 1523–1578.

3. Curve complexes and finite index subgroups of mapping class groups, with D. Margalit.
   Geometriae Dedicata, vol. 118 (2006) 71–85.

4. Dimension and rank for mapping class groups, with Y. Minsky.
   Annals of Mathematics, vol. 167, (2008), 1055–1077.

5. Quasi-isometric classification of graph manifolds, with W. Neumann.
   Duke Mathematical Journal, vol. 141, (2008) 217–240.

6. Thick metric spaces, relative hyperbolicity, and quasi-isometric rigidity, with C. Druţu and L. Mosher.
   Mathematische Annalen, vol. 344, (2009), 543–595.

7. Commensurability and QI classification of free products of finitely generated abelian groups, with T. Januszkiewicz and W. Neumann.
   Proceedings of the American Mathematical Society, vol. 137, (2009) 811–813.

8. Geometry and rigidity of mapping class groups, with B. Kleiner, Y. Minsky, and L. Mosher.
   Geometry & Topology, vol. 16 (2012) 781–888.

9. Growth of intersection numbers for free group automorphisms, with M. Bestvina and M. Clay.
   Journal of Topology, vol. 3, (2010) 280–310.

10. Centroids and the Rapid Decay property for mapping class groups, with Y. Minsky.
    Journal of the London Mathematical Society, vol. 84, (2011) 765–784.

11. Median structures on asymptotic cones and homomorphisms into mapping class groups, with C. Druţu and M. Sapir.
    Proceedings of the London Mathematical Society, vol. 102, (2011) 503–554.

12. Quasi-isometric classification of high dimensional right angled Artin groups, with T. Januszkiewicz and W. Neumann.
    Groups, Geometry, and Dynamics, vol. 4, (2010) 681–692.

13. Quasi-isometric classification of non-geometric 3–manifold groups, with W. Neumann.
    Journal für die Reine und Angewandte Mathematik [Crelle's Journal], vol. 669, (2012) 101–120.

14. Divergence and quasimorphisms of right-angled Artin groups, with R. Charney.
    Mathematische Annalen, vol. 352, Issue 2 (2012) 339–356.

15. Homomorphisms into mapping class groups. An addendum, with C. Druțu and M. Sapir.
    Proceedings of the London Mathematical Society, vol. 102, (2011) 555–562.

16. Divergence, thick groups, and short conjugators, with C. Druțu.
    Illinois Journal of Mathematics, vol. 58 (2014) 939–980.

17. Cubulated groups: thickness, relative hyperbolicity, and simplicial boundaries, with M. Hagen.
    Groups, Geometry, and Dynamics, vol. 10 (2016) 649–707.

18. Higher dimensional divergence for mapping class groups, with C. Druțu.
    Groups, Geometry, and Dynamics, vol. 13 (2019) 1035–1056.

19. Thickness, relative hyperbolicity, and randomness in Coxeter groups, with M. Hagen and A. Sisto, and an appendix written jointly with P.-E. Caprace.
    Algebraic & Geometric Topology, vol. 17 (2017) 705–740.

20. Geometric Group Theory: an introduction
    Introduction to Modern Mathematics. Vol. 33 of the Advanced Lectures in Mathematics series (2015) 115–134.

21. Hierarchically hyperbolic spaces I: curve complexes for cubical groups, with M. Hagen and A. Sisto.
    Geometry & Topology, vol. 21 (2017) 1731–1804.

22. Combinatorial higher dimensional isoperimetry and divergence, with C. Druțu.
    Journal of Topology & Analysis, vol. 11 (2019) 499–534.

23. Global Structural Properties of Random Graphs, with V. Falgas-Ravry, M. Hagen and T. Susse.
    International Mathematics Research Notices, vol. 2018, no. 5 (2018) 1411–1441.

24. Hierarchically hyperbolic spaces II: Combination theorems and the distance formula, with M. Hagen and A. Sisto.
    Pacific Journal of Mathematics, vol. 299 (2019) 257–338.

25. Asymptotic dimension and small-cancellation for hierarchically hyperbolic spaces and groups, with M. Hagen and A. Sisto.
    Proceedings of the London Mathematical Society, vol. 114 (2017) 890–926.

26. Quasiflats in hierarchically hyperbolic spaces, with M. Hagen and A. Sisto.
    Duke Mathematical Journal, vol. 170, (2021) 909–996.

27. Largest acylindrical actions and stability in hierarchically hyperbolic groups, with C. Abbott and M. Durham.
Transactions of the American Mathematical Society, vol. 8 (2021) 66–104.

28. A counterexample to questions about boundaries, stability, and commensurability.
Proceedings of Beyond Hyperbolicity, London Mathematical Society Lecture Note Series no. 454.

29. Conjugator lengths in hierarchically hyperbolic groups, with C. Abbott.
Geometry, Groups, and Dynamics, vol 17 (2023) 805–838.

30. A combinatorial take on hierarchical hyperbolicity and applications to quotients of mapping class groups, with M. Hagen, A. Martin, and A. Sisto.
http://arXiv.org/abs/2005.00567

31. Square percolation and the threshold for quadratic divergence in random right-angled coxeter groups, with V. Falgas-Ravry and T. Susse.
Random Structures & Algorithms, vol. 60 (2022) 594–630.

32. Structure invariant properties of the hierarchically hyperbolic boundary, with C. Abbott and J. Russell.
Journal of Topology & Analysis, to appear.
https://arxiv.org/abs/2208.07930

33. Relative hyperbolicity, thickness, and the hierarchically hyperbolic boundary, with C. Abbott and J. Russell.

Student theses supervised

Graduate

Harold Sultan. Ph. D. 2012, at Columbia University.
The asymptotic cone of Teichmüller space: tree-graded structure and divergence.
Currently software engineer at Facebook.

Timothy Susse. Ph. D. 2014, at CUNY Graduate Center.
Stable commutator length and the geometry of 3–manifolds. Currently assistant professor at Bard College Simons Rock.

Ivan Levcovitz. Ph. D. 2018, at CUNY Graduate Center.
Divergence of CAT(0) cube complexes and Coxeter groups. Currently postdoctoral fellow at Tufts.

Jacob Russell. Ph. D. 2020, at CUNY Graduate Center.
Convexity and curvature in hierarchically hyperbolic spaces. Currently NSF postdoctoral fellow at Rice University.

Daniel Berlyne. Ph. D. 2021, at CUNY Graduate Center.
Hierarchical hyperbolicity of graph products and graph braid groups. Currently Heilbronn Fellow at University of Bristol, UK.

Hai Yu. Ph. D. candidate at CUNY Graduate Center.

Zhihao Mu. Ph. D. candidate at CUNY Graduate Center.

Undergraduate honors theses

So Eun Park. Columbia University. 2009.
Symmetries of the Tower of Hanoi. **American Mathematical Monthly**, April 2010, and Undergraduate Honors Thesis.

Michael Rand. Columbia University. 2009.
On the Frame-Stewart algorithm for the Tower of Hanoi.

Mark Davis. Lehman Scholars Program CUNY. 2013. *Topological Classification of Surfaces.*

Rylee Lyman. Columbia University. 2015.
Algorithmic computation of thickness in right-angled Coxeter groups.

Selected Lectures (from over 150)

Invited Plenary Conference and Colloquia Lectures

1, 2, 3: Curves, Surfaces, and 3-Manifolds; Technion, Israel. Summer 2023.

Probabilistic Midwinter Meeting; Umeå University, Sweden. Winter 2023.

Groups with Hyperbolic Features; ETH, Zurich, Switzerland. Fall 2019

Graduate school on Geometry of Teichmuller spaces; SUNY Stony Brook. Spring 2019

Nonpositively Curved Groups on the Mediterranean; Technion, Israel. Spring 2018.

Geometry of Teichmüller space and mapping class groups Conference; Warwick, UK. Spring 2018.

Geometry, Groups, and Dynamics (3 lectures); India. Fall 2017.

Colloquium; Vanderbilt. Fall 2017.

Geometric Groups in the Gulf; Florida. Spring 2017.

Non-Positive Curvature in Action; Newton Institute, Cambridge University, England. Spring 2017.

Probabilistic Methods in Topology; Centre de Recherches Mathématiques, Montréal, Canada. Fall 2016.

Beyond Hyperbolicity Conference; Cambridge University, England. Summer 2016.

Geometric and Asymptotic Group Theory with Applications; Stevens Institute of Technology. Summer 2016.

Colloquium; Warwick, England. Spring 2016.

Stanley Friedlander Colloquium; City University of New York. Spring 2016.

Workshop on Geometric Group Theory and Geometric Topology; University of Virgina. Fall 2015.

Théorie géométrique et asymptotique des groupes et applications; Centre International de Rencontres Mathématiques, Luminy, France. Fall 2015.

Groups and Geometry in the South East; Oxford, England. Summer 2015.

Topology; Oberwolfach, Germany. Spring 2015.

Teichmuller theory and surfaces in 3–manifolds Conference; Italy. Summer 2014.

Georgia Topology Conference. Summer 2014.

Surfaces in Sao Paolo; Brazil. Spring 2014.

Colloquium; University of Michigan. Fall 2013.

International Summer School on Modern Mathematics (5 lectures); Tsinghua University, Beijing, China. Summer 2013.

International Conference on Surveys of Modern Mathematics; Morningside Center of Mathematics, Chinese Academy of Sciences, Beijing, China. Summer 2013.

Coarse geometry of infinite groups; Université de Lille, France. Summer 2012.

Faces of geometry: 3-manifolds, groups and singularities; Columbia University, New York. Summer 2011.

Geometric Groups in the Gulf; Florida. Spring 2011.

Plenary lecture at AMS Southeastern Sectional Meeting, Spring 2011.

Conference on Geometric Group Theory; McGill University, Canada. Fall 2010.

Conference on Algebra and Algebraic Geometry with Applications: Celebration of the Eightieth Birthday of Professor Shreeram S. Abhyankar; Purdue University. Summer 2010.

Non-positive Curvature and Geometric Structures in Group Theory; Oberwolfach, Germany. Spring 2010.

Quasi-isometric rigidity in low dimensional topology; Banff International Research Station, Canada. Spring 2010.

Wasatch Topology Conference; Park City, Utah. Winter 2009.

Conference on Topology and Computers; Tokyo Institute of Technology, Japan. Summer 2009.

NSF-CBMS conference (Families of Riemann Surfaces and Weil-Petersson); Central Connecticut State University. Summer 2009.

Colloquium; Temple University, Pennsylvania. Spring 2009.

The 5th East Asian School of Knots and Related Topics; Gyeongju, Korea. Winter 2009.

Colloquium; University of California, Los Angeles. Fall 2008.

Colloquium; University of California, Davis. Fall 2008.

Colloquium; University of Muenster, Germany. Fall 2008

Geometric Group Theory, Geometric Analysis, and Mapping Class Groups; Johns Hopkins University, Maryland. Summer 2008.

Colloquium; Tufts University, Massachusetts. Spring 2008.

Colloquium; Tulane University, Louisiana. Spring 2008.

Colloquium; Lehman College, CUNY, New York. Fall 2007.

Research conference on geometric group theory; Mathematical Science Research Institute, Berkeley, California. Fall 2007.

Analysis on Homogeneous Spaces; University of Arizona. Spring 2007.

Topology; Banff International Research Station, Canada. Winter 2007.

Outre-espace et Espace de Teichmüller; Centre International de Rencontres Mathématiques, Luminy, France. Winter 2007.

Conference on Geometric Group Theory; Centre de Recherches Mathématiques, Montréal, Canada. Summer 2006.

Summer Research Program on Low Dimensional Topology; Park City Math Institute, Utah. Summer 2006.

Georgia Topology Conference; University of Georgia. Summer 2006.

Colloquium; Brigham Young University, Utah. Fall 2005.

Geometric and Asymptotic Methods in Group Theory; Banff International Research Station, Canada. Summer 2005.

Geometric Groups in the Gulf; Florida. Fall 2004.

Conference on Combinatorial Topology in Mapping Class Groups; University of Chicago. Spring 2004.

Invited Conference Sectional Lectures

Mathematical Congress of the Americas 2017, Special Section on Geometric group theory; Montréal, Canada. Summer 2017.

AMS Sectional Meeting, Special Section on Geometry of groups, surfaces and 3-manifolds; Rutgers University. Fall 2015.

AMS Sectional Meeting, Special Section on Geometric Group Theory and Topology; University of Alabama. Spring 2015.

AMS/MAA National Joint Meeting, Special Section on Geometric Group Theory; Baltimore, Maryland. Winter 2014.

Canadian Mathematical Society Sectional Meeting, Special Section on Geometric Group Theory and Low Dimensional Topology; Ottawa, Canada. Fall 2013.

AMS Sectional Meeting, Special Section on Geometric aspects of topology and group theory; Temple University. Fall 2013.

AMS Sectional Meeting, Special Section on Asymptotic Group Theory; University of Hawaii. Spring 2012.

AMS/MAA National Joint Meeting, Special Section on Hyperbolicity in manifolds and groups; Boston, Massachusetts. Winter 2012.

Spring Topology and Dynamics Conference; University of Florida (Section on Geometric Topology). Spring 2009.

Spring Topology and Dynamics Conference; University of Florida (Section on Geometric Group Theory). Spring 2009.

AMS/MAA National Joint Meeting, Special Section on Geometric Group Theory; New Orleans, Louisiana. Winter 2007.

AMS Sectional Meeting, Special Section on Low Dimensional Topology and Geometry; University of Utah. Fall 2006.

Combinatorial and Geometric Group Theory Conference; Vanderbilt, Tennessee. Summer 2006.

Spring Lecture Series; University of Arkansas. Spring 2006.

Spring Topology and Dynamics Conference; UNC Greensboro. Spring 2006.

Geometric and Probabilistic Methods in Group Theory and Dynamical Systems; Texas A&M, Texas. Fall 2005.

AMS Sectional Meeting, Special Section on Geometric Group Theory; Bard College, New York. Fall 2005.

Asymptotic and Probabilistic Methods in Geometric Group Theory; University of Geneva, Switzerland. Summer 2005.

Albany Group Theory Conference; New York. Fall 2004.

Albany Group Theory Conference; New York. Fall 2003.

Invited Seminar Lectures

Brown University; Geometry and Topology Seminar. Fall 2023.

Brandeis University; Topology Seminar. Spring 2023.

Cambridge, UK; Geometric Group Theory Seminar. Fall 2022.

Rice University; Topology Seminar. Fall 2022.

Cornell University; Topology and Geometric Group Theory Seminar. Fall 2022.

University of Michigan; Topology Seminar. Fall 2022.

University of Muenster, Germany; Geometry/Topology Seminar (online). Spring 2021.

Ohio State University; Geometric Group Theory Seminar (online). Spring 2021.

Vanderbilt University; Topology and Group Theory Seminar. Fall 2019.

University of Toronto; Geometry & Topology Seminar. Spring 2019.

Princeton University; Topology Seminar. Fall 2018.

CUNY, Graduate Center; Magnus Seminar. Spring 2017.

University of Michigan; Geometry Seminar. Fall 2016.

McGill University, Canada; Topology Seminar. Spring 2016.

University of Utah; Max Dehn Seminar. Spring 2016.

Cornell University; Topology and Geometric Group Theory Seminar. Fall 2015.

CUNY, Graduate Center; Magnus Seminar. Fall 2015.

Oxford University, England; Topology Seminar. Spring 2015.

Vanderbilt University; Topology and Group Theory Seminar. Spring 2015.

CUNY, Graduate Center; Geometry/Topology Seminar. Spring 2015.

Temple University; Topology/Geometry Seminar. Spring 2015.

Yale University; Topology/Geometry Seminar. Spring 2015.

Tufts University; Geometric Group Theory and Topology Seminar. Fall 2014.

Seoul National University; Geometric Group Theory Seminar (3 lectures). Fall 2014.

Korea Advanced Institute of Science and Technology; Topology Seminar. Fall 2014.

Lafayette and Lehigh Colleges; Geometric Topology Seminar. Spring 2014.

Columbia University; Geometric Topology Seminar. Spring 2014.

Yale University; Topology/Geometry Seminar. Fall 2013.

CUNY, Graduate Center; Magnus Seminar. Fall 2013.

Temple University; Topology/Geometry Seminar. Spring 2013.

Yale University; Topology/Geometry Seminar. Spring 2012.

University of Maryland; Geometry and Topology Seminar. Fall 2011.

CUNY Graduate Center; Number Theory Seminar. Fall 2011.

SUNY Stony Brook; Topology and Geometry Seminar. Fall 2011.

Oxford University, England; Topology Seminar. Fall 2010.

Warwick University, England; Geometry and Topology Seminar. Fall 2010.

Vanderbilt University; Topology and Group Theory Seminar. Spring 2010.

Princeton University; Topology Seminar. Spring 2010.

Tufts University; Geometric Group Theory and Topology Seminar. Spring 2010.

Columbia University; Geometric Topology Seminar. Spring 2010.

University of Southern California; Geometry and Topology Seminar. Fall 2008.

University of Muenster, Germany; Geometry/Topology Seminar (3 Lectures). Fall 2008

CUNY, Graduate Center; Differential Geometry Seminar. Fall 2008.

Columbia University; Geometric Topology Seminar. Fall 2008.

Vanderbilt University; Noncommutative Geometry Seminar (2 lectures). Spring 2008.

Yale University; Topology Seminar. Spring 2008.

University of California, Davis; Geometry/Topology Seminar. Spring 2008.

Rutgers University, New Brunswick; Topology and Geometry Seminar. Fall 2007.

Columbia University; Geometric Topology Seminar. Fall 2007.

University of Pennsylvania; Geometry and Topology Seminar. Fall 2007.

Brown University; Geometry and Topology Seminar. Spring 2007.

Harvard University; Geometry and Dynamics Seminar. Spring 2007.

Tufts University; Geometric Group Theory and Topology Seminar. Spring 2007.

University of California, Berkeley; Topology Seminar. Spring 2007.

University of Southern California; Geometry and Topology Seminar. Fall 2006.

Princeton University; Topology Seminar. Fall 2006.

Vanderbilt University; Topology and Group Theory Seminar. Spring 2006.

University of Texas, Austin; Topology Seminar. Spring 2006.

Columbia University; Geometric Topology Seminar. Fall 2005.

Ohio State University; Geometric Group Theory Seminar. Fall 2005.

Cornell University; Topology and Geometric Group Theory Seminar. Fall 2005.

University of Utah; Max Dehn Seminar. Fall 2005.

Columbia University; Geometric Topology Seminar. Spring 2005.

CUNY, Graduate Center; Magnus Seminar. Fall 2004.

Cornell University; Topology and Geometric Group Theory Seminar. Fall 2004.

Rutgers University, New Brunswick; Topology and Geometry Seminar. Spring 2004.

University of Utah; Max Dehn Seminar. Spring 2004.

California Institute of Technology; Geometry and Topology Seminar. Fall 2003.

University of Chicago; Geometry and Topology Seminar. Fall 2003.

University of Illinois, Chicago; Geometry, Topology, and Dynamics Seminar. Fall 2003.

Columbia University; Geometric Topology Seminar. Fall 2003.

SUNY Stony Brook; Complex Analysis and Geometry Seminar. Fall 2002.

Teaching Experience

Graduate Center, CUNY

Topology; Topics in Geometric Group Theory; Introduction to Mapping Class Groups; Topics in Group Theory; Independent reading courses on "Mostow Rigidity," "Mapping Class Groups," "SCL" and other subjects.

Lehman College, CUNY

Topology; Abstract algebra; Linear Algebral; Honors courses on "The Shape of Space"; Multivariable Calculus; Calculus; Classical Geometry; etc. Reading courses: "topology of surfaces," "machine learning," etc.

Columbia University

Multivariable Calculus.

University of Utah

Trigonometry; Algebraic Topology; Point-set Topology; Honors Undergraduate Thesis; Undergraduate reading course on One-dimensional Dynamical Systems; Graduate reading course in Topology.

Barnard College

Calculus and Multivariable Calculus.

SUNY Stony Brook

Calculus; Mathematical Logic (Upper Division Math/Computer Science course).

Professional Activities

Ph.D. Advisor for Daniel Berlyne (CUNY Graduate Center, 2021), Jacob Russell (CUNY Graduate Center, 2020), Ivan Levcovitz (CUNY Graduate Center, 2018), Timothy Susse (CUNY Graduate Center, 2014), Harold Sultan (Columbia University, 2012).

Mentor for Carolyn Abbott (Ph.D. University of Wisconsin 2017) during extended visit to CUNY for 2015–2016 and 2016–2017 academic years.

Promotions and Budget Committee, Lehman College Department of Mathematics and Computer Science, 2010–2016. (Elected for two 3 year terms.)

Educational Policy Committee, Lehman College Department of Mathematics and Computer Science, 2012–2020. (Elected.)

Executive Committee, CUNY Graduate Center Department of Mathematics (elected). 2017–present.

Refereed for a number of journals, including: *Advances in Mathematics, Algebraic & Geometric Topology, American Mathematical Monthly, Commentarii Mathematici Helvetici, Compositio Mathematica, Crelle's Journal, Duke Mathematical Journal, Geometriae Dedicata, Geometric and Functional Analysis, Geometry & Topology, Groups, Geometry, and Dynamics, Illinois Journal of Mathematics, International Mathematics Research Notices, International Journal of Algebra and Computation, Involve, Journal of the American Mathematical Society, Journal of the European Mathematical Society, Journal of IHES, Journal of the London Mathematical Society, Journal of Modern Dynamics, Journal of Topology, L'Enseignement Mathématique, Mathematical Research Letters Mathematische Annalen, Mathematische Zeitschrift, Michigan Mathematical Journal, New York Journal of Mathematics, Pacific Journal of Mathematics, Portugaliae Mathematica, Proceedings of the American Mathematical Society, Revista Colombiana de Matematicas, Transactions of the American Mathematical Society, Topology and its Applications*, etc.

University External Review Committee for Barnard College, Columbia 2017.

Grants reviews: NSF, NSA, Simons Foundation, misc European grants agencies.

Referee for CUNY University-wide award for scholarly achievement.

Regularly write letters of evaluation for promotions to Associate and Full Professor.

Reviewer for *Math Reviews*.

Qualifying Exams Committee at CUNY Graduate Center, 2010–present

Strategic Plan for Research Committee, Lehman College, 2013–2014.

Calculus Committee, Mathematics Department, Lehman College, 2008–2013.

Assessment Committee, Lehman College, 2009–2010.

Initiated and organized the Geometry and Topology Seminar, CUNY Graduate Center, Fall 2008–present.

Co-organizer of "Advances in Hierarchical Hyperbolicity" at Banff Internation Research Station, May 2024.

Co-organizer of "1, 2, 3: Curves, Surfaces, and 3-Manifolds" at Technion University, Israel, June 2023.

Co-organizer of "Reflections on Geometry: 3-Manifolds, Groups and Singularities – A Conference in Honor of Walter Neumann," at Barnard College, Columbia University, June 2022.

Co-organizer of Spring Topology & Dynamics Special Session on "Geometric Group Theory," March 2016.

Co-organizer of conference on "Mapping class groups and categorification," at Banff International Research Station, Canada, April 2013.

Member of scientific committee for "Young geometric group theory" international conference in Haifa, Israel, April 2013.

Organizer of CBMS–NSF Conference "3-Manifolds, Artin Groups, and Cubical Geometry," at CUNY Graduate Center, August 2011.

Co-organizer of "Faces of Geometry: 3-Manifolds, Groups and Singularities – A Conference in Honor of Walter Neumann," at Barnard College, Columbia University, June 2011.

Co-organizer of AMS Special Session on "Geometric Group Theory," at Georgia Southern University, March 2011.

Co-organizer of "Conference on Conformal Dynamics and Hyperbolic Geometry to celebrate the contributions of Linda Keen," at CUNY Graduate Center, 2010.

Co-organizer of conference on "Quasi-isometric rigidity in low dimensional topology," at Banff International Research Station, Canada, 2010.

Co-organizer of the Max Dehn Seminar, University of Utah, 2005–2007.

Co-organizer of "Braids, Links, and Mapping Class Groups," an international conference in honor of Joan Birman; 2005.

Co-organizer of the Geometric Topology Seminar, Columbia University, 2004–2005.

Co-organizer of the Complex Analysis and Geometry Seminar, SUNY Stony Brook, 2002–2003.

Co-organizer of the Dynamical Systems Seminar, UC Berkeley, 1996–1997.

Synergistic Activities

Ph.D. Thesis Committee Member for: Alexander Lowen (Rutgers, 2023), Oussama Bensaid (Université de Paris, France, 2022), Harry Petyt (University of Bristol, UK, 2022), Daniel Berlyne (CUNY 2021), Bruno Robbio (University of the Basque Country, Spain, 2020), Jacob Russell (CUNY 2018), Saikat Das (Rutgers, 2019), Ivan Levcovitz (CUNY 2018), James Cornish (Columbia, 2018), Alexander Taam (CUNY, 2015), Chris Arettines (CUNY, 2015), Jingyin Huang (New York University, 2015), Corrin Clarkson (Columbia, 2014), Timothy Susse (CUNY, 2014), Harold Sultan (Columbia University, 2012), Mark Hagen (McGill, Canada, 2011).

Ph.D. Qualifying Exam Committee Member for: Weiyan Lin (CUNY, 2023), Zhihao Mu (CUNY, 2022), Alexander Stas (CUNY, 2018), Hai Yu (CUNY, 2018), Daniel White (CUNY, 2018), Daniel Berlyn (CUNY, 2017), Jacob Russell (CUNY, 2016), Matt Sunderland (CUNY, 2015), Ivan Levcovitz (CUNY, 2013), Robert Suzzi Valli (CUNY, 2011) Timothy Susse (CUNY, 2011), Harold Sultan (Columbia University, 2008).

Organized and ran Graduate reading courses for beginning and advanced students 2005 – present.

Undergraduate Honors Thesis Advisor for: Huzaifa Farooqui (Lehman, 2023), Robert Lyman (Columbia, 2015), Mark Davis (Lehman, 2013), Michael Rand (Columbia, 2009), So Eun Park (Columbia, 2009).

Organized and ran an NSF supported Research Experience for Undergraduates (REU) program at Columbia University on "Geometry of Coxeter groups" for 5 students, Summer 2014.

Organized and ran an NSF supported Research Experience for Undergraduates (REU) program at Columbia University on "The Tower of Hanoi" for 5 students, Summer 2008.

Organized and ran an NSF supported Research Experience for Undergraduates (REU) program at the University of Utah on "The Geometry of Mobius Transformations" for 8 students, Summer 2006.

Organizer of the Graduate Topology Seminar, University of Utah, 2006.

Recruitment of new incoming students (intended mathematics majors) for Barnard College, 2004–2005.

As a volunteer, taught Pre-Algebra to a group of inmates at San Quentin State Prison, California, who were working towards Associate in Arts degrees, 1997–1998.

Programming   Proficient in `C++` and Python. Developed software both for experimental mathematics and for computer assisted proofs, see e.g., http://comet.lehman.cuny.edu/behrstock/random.html

Other   Involved as a volunteer organizer for numerous community groups including: Juvenile Diabetes Research Foundation and Coalition for Safe Schools. See: http://comet.lehman.cuny.edu/behrstock/personal.html