DHRUV MUBAYI

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University of Illinois
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PERSONAL

- Born on August 20, 1973 in Bombay (now Mumbai), India

MATHEMATICAL INTERESTS

- Combinatorics, especially extremal and probabilistic questions on graphs and hypergraphs, with applications to Theoretical Computer Science

EMPLOYMENT HISTORY

- 2008–: Professor, University of Illinois at Chicago
- 2007–2008: Associate Professor, Department of Mathematical Sciences, Carnegie Mellon University
- 2005–2008: Associate Professor, University of Illinois at Chicago
- 2002–2005: Assistant Professor, University of Illinois at Chicago
- 2001–2002: Postdoctoral Researcher, Theory Group, Microsoft Research
- 1998–2001: Visiting Assistant Professor, School of Mathematics, Georgia Institute of Technology

EDUCATION

- 1998: Ph.D. in Mathematics, University of Illinois at Urbana-Champaign
- 1995: B.S. in Mathematics, Magna cum Laude, Davidson College
  Second person in the history of Davidson College to graduate with High Honors in mathematics

AWARDS/FELLOWSHIPS

- 2023: Simons Fellowship in Mathematics
- 2022: Humboldt Research Award (also known as Humboldt Prize)
- 2019: Fellow of the American Mathematical Society (class of 2020)
- 2005: Alfred P. Sloan Research Fellowship
- 1998: Phi Kappa Phi, University of Illinois
- 1998: Trjitzinski and Parker Fellowships, University of Illinois
- 1996: Liberal Arts Scholarship and Trjitzinski Fellowship, University of Illinois
- 1995: Phi Beta Kappa, Davidson College
- 1995: William G. McGavock Award, Davidson College (awarded to best senior Math major)
- 1993: William D. Vinson Award, Davidson College (awarded to best sophomore Math major)

RESEARCH GRANTS (as PI)

- 2026-2028: National Science Foundation (NSF) grant DMS-2552740
- 2026-2031: Simons Foundation, Travel Support for Mathematicians
- 2022-2026: NSF grant DMS-2153576
- 2020-2023: NSF grant DMS-1952767. Focused Research Group:
  Collaborative Research: Pseudorandomness in Ramsey Theory
- 2018–2022: NSF grant DMS-1763317
- 2013–2018: NSF grant DMS-1300138
- 2010–2013: NSF grant DMS-0969092
- 2007–2010: NSF grant DMS-0653946
- 2004–2007: NSF grant DMS-0400812
- 2003: Campus Research Board grant, University of Illinois at Chicago
- 1999–2003: NSF grant DMS-9970325

FUNDED CONFERENCES (as organizer/co-organizer or PI/Co-PI)

- 2026: Extremal Graph and Hypergraph Theory (with Jozsef Balogh, Jie Ma)
  Yau Mathematical Sciences Center, Sanya, China
- 2026: NSF Grant DMS-2545369 (PI) Graduate Student Combinatorics Conference 2026, UIC
- 2025: NSF grant DMS-2502842 (PI), 10th Lake Michigan Workshop on Combinatorics and Graph Theory (with Vishesh Jain, Marcus Michelen), UIC
- 2023: Workshop on Ramsey Theory (with Andrew Suk, Jacques Verstraëte),
  UC San Diego (NSF funded)
- 2022: Extremal Combinatorics and Geometry (with Andrew Suk, Orit Raz, Caroline Terry),
  Banff International Research Station (BIRS), Banff, Canada
- 2022–24: AIM SQuaRE Workshop: Classical Ramsey numbers and Pseudorandomness (with David Conlon, Jacob Fox, Andrew Suk, Jacques Verstraëte), American Institute of Mathematics (AIM)
- 2022: NSF grant DMS-1952959 (Co-PI), 7th Lake Michigan Workshop on Combinatorics and Graph Theory (with Will Perkins), UIC
- 2017: Recent Advances in Extremal Combinatorics (with Tao Jiang, Jie Ma)
  Yau Mathematical Sciences Center, Sanya, China
- 2016–18: AIM SQuaRE Workshop: Turán problem for sparse hypergraphs
  (with Zoltan Füredi, Tao Jiang, Alexandr Kostochka, Jacques Verstraëte)
- 2016: NSF grant DMS-1559606 (Co-PI), EXCILL III: Extremal Combinatorics at Illinois
  (with Jozsef Balogh, Tao Jiang, Hemanshu Kaul, Douglas West, Gexin Yu),
  Illinois Institute of Technology
- 2015: AIM Workshop on Graph Ramsey Theory (with David Conlon and Jacob Fox)
- 2012: Workshop on Hypergraph Turán Problem (with Penny Haxell, Oleg Pikhurko and Tibor Szabo),
  Oberwolfach, Germany

INSTITUTIONAL GRANT

- 2009-2019: PI and Project Director of UIC portion of NSF grant HRD-0904024, Illinois Louis Stokes Alliance for Minority Participation

DEPARTMENT/UNIVERSITY SERVICE

- 2017–2018: Director of Graduate Studies, Department of Mathematics, Statistics and Computer Science, UIC
- 2016–2019: UIC Graduate College Awards Committee
- 2013–2014: Associate Head for Operations, Department of Mathematics, Statistics, and Computer Science, UIC
- 2007–2008: Postdoctoral hiring committee, Department of Mathematical Sciences, Carnegie Mellon University
- 2002–: Various departmental committees at UIC (most multiple times), including:
  hiring committee (tenure-track, postdoc and administrative staff)
  advisory committee (elected)
  salary committee
  visitor fund committee (as chair)
  colloquium committee (as chair)
  mathematical computer science program committee (as chair)
  graduate studies committee
  undergraduate studies committee
  math education committee
  personnel review committees for promotion cases

PROFESSIONAL SERVICE

- Editorial Work:

  Editor-in-Chief, *Journal of Combinatorial Theory, Series B* (2025-)

  Advisory Editor, *Combinatorial Theory* (2021–)

  Editorial Board, *Discrete Mathematics* (2010–)

  Editorial Board, *Order* (2008–)

  Managing Editor, *Journal of Combinatorial Theory, Series B* (2010-2023)

  Advisory Board, *Journal of Combinatorial Theory, Series A* (2007–2020)

  Associate Editor, *SIAM Journal on Discrete Mathematics* (2010–2018)

  Associate Editor, *Discrete Mathematics* (2007–2010)

- Refereeing (approximately 30 requests per year):

  Selected journals to which Refereeing/High level opinion provided

  General Math journals: *Acta Mathematica, Annals of Mathematics, Advances in Mathematics, Duke Mathematical Journal, Transactions of the American Mathematical Society, Memoirs of the American Mathematical Society, Israel Journal of Mathematics, Proceedings of the American Mathematical Society, Proceedings of the London Mathematical Society, Forum of Mathematics Pi*

  Combinatorics Focused Math journals: *Combinatorica, Journal of Combinatorial Theory, Series A and B, Journal of Graph Theory, Random Structures and Algorithms, Combinatorics, Probability and Computing, Electronic Journal of Combinatorics, SIAM Journal on Discrete Mathematics, Forum*

of Mathematics Sigma, European Journal of Combinatorics, Graphs and Combinatorics, Discrete Applied Mathematics, Discrete Mathematics

Other journals: *Information Processing Letters, IEEE Transactions on Information Theory*

- Grant proposal reviewing:

  Knut and Alice Wallenberg Foundation/Royal Swedish Academy of Sciences

  Swiss National Science Foundation (SNSF)

  Simons Foundation

  National Science Foundation (NSF)

  National Security Agency (NSA)

  U.S.-Israel Binational Science Foundation (BSF)

  Israel Science Foundation (ISF)

  Natural Sciences and Engineering Research Council (NSERC, Canada)

  Hungarian Scientific Research Fund (OTKA)

  International Centre for Mathematical Sciences (ICMS, UK)

  Leverhulme Research Fellowship (UK)

  National Research, Development and Innovation Office (NRDI, Hungary)

  European Research Council (ERC)

  Czech Science Foundation

  Austrian Science Fund (FWF)

  Dutch Research Council (NWO)

- Member of NSF combinatorics panel (multiple times) and NSF Core Math CAREER panel
- Member of external review panel for Discrete Mathematics Research Group at the Institute for Basic Sciences (South Korea)
- Program Committee memberships:

  EuroComb 2011, 2018

  International Conference on Number Theory and Discrete Mathematics (ICNDTM) 2020

- Judge for orals competition, Illinois Council of Teachers of Mathematics (ICTM) annual high school mathematics contest (2005, 2006, 2009, 2013)
- Judge for QED: Chicago's Youth Math Symposium (2013, 2018, 2021)
- Co-teacher of 3 week workshop in Discrete Math at UIC to K-8 Chicago public school teachers (2006)
- Instructor for Math Circles of Chicago to 7th and 8th grade students (2017-)
- Table lead for Julia Robinson Math Festival for 3rd-8th grade students (and their parents) at Walter Payton Prep School (2019, 2024)
- Guest lecturer Young Scholars Program at UIC (2021-)
- Conference organizing (complete list):

  12/2026: Extremal Graph and Hypergraph Theory (with Jozsef Balogh, Jie Ma)
  Yau Mathematical Sciences Center, Sanya, China

  12/2026: Graduate Student Combinatorics Conference 2026, UIC

04/2025: 10th Lake Michigan Workshop on Combinatorics and Graph Theory (with Vishesh Jain, Marcus Michelen), UIC, Chicago

02/2023: Workshop on Ramsey Theory (with Andrew Suk, Jacques Verstraëte), UC San Diego

08/2022: Extremal Combinatorics and Geometry (with Andrew Suk, Orit Raz, Caroline Terry), Banff International Research Station (BIRS), Banff, Canada

07/2022: Second Armenian Workshop On Graphs, Combinatorics, Probability, and their application to machine learning (with Perouz Taslakian, Liana Yepremyan), Armenia

2022–24: American Institute of Mathematics (AIM) SQuaRE Workshop: Classical Ramsey numbers and Pseudorandomness (with David Conlon, Jacob Fox, Andrew Suk, Jacques Verstraëte), San Jose (three annual week long visits fully funded by AIM)

04/2022: Seventh Lake Michigan Workshop on Combinatorics and Graph Theory (with Will Perkins), UIC, Chicago

12/2021: Recent Advances in Extremal Combinatorics II (with Tao Jiang, Jie Ma) Yau Mathematical Sciences Center, Sanya, China (postponed due to Covid)

2016–18: AIM SQuaRE Workshop: Turán problem for sparse hypergraphs (with Zoltan Füredi, Tao Jiang, Alexandr Kostochka, Jacques Verstraëte)

05/2017: Recent Advances in Extremal Combinatorics (with Tao Jiang, Jie Ma) Yau Mathematical Sciences Center, Sanya, China

08/2016: EXCILL III: Extremal Combinatorics at Illinois (with Jozsef Balogh, Tao Jiang, Hemanshu Kaul, Douglas West, Gexin Yu), Illinois Institute of Technology, Chicago

01/2015: Workshop on Graph Ramsey Theory (with David Conlon and Jacob Fox), American Institute of Mathematics (AIM), Palo Alto

09/2014: Workshop on Extremal and Probabilistic Combinatorics (with Penny Haxell, Eyal Lubetzky, Benny Sudakov), Institute for Mathematics and its Applications (IMA), Minneapolis

06/2013: Invited Minisymposium in Extremal Combinatorics, CANADAM 2013, Newfoundland, Canada

04/2012: Workshop on Hypergraph Turán Problem (with Penny Haxell, Oleg Pikhurko and Tibor Szabo), Oberwolfach, Germany

03/2011: Workshop on Hypergraph Turán Problem (with Oleg Pikhurko and Benny Sudakov), American Institute of Mathematics (AIM), Palo Alto

02/2010: Workshop in Graph Theory and Combinatorics in Memory of Uri Peled (with Shmuel Friedland and Gyuri Turán), UIC

11/2009: Workshop on Topics on Graphs and Hypergraphs (with Penny Haxell, Benny Sudakov, Jacques Verstraëte), IPAM, UCLA

10/2007: Special Session on Extremal and Probabilistic Combinatorics (with Jozsef Balogh), AMS Central Section Meeting (#1030), Chicago

07/2006: Minisymposium, SIAM Discrete Mathematics conference, Victoria, Canada

10/2004: Special Session on Extremal Combinatorics (with Yi Zhao), AMS Central Section Meeting (#1001), Evanston

06/2004: Minisymposium, SIAM Discrete Mathematics conference (with André Kündgen), Nashville

04/2003: Special Session on Extremal Combinatorics (with Jozef Skokan), AMS Central Section Meeting (#985), Bloomington, Indiana

04/2000: Special Session on Graph Theory (with Robin Thomas), AMS Southeastern Section Meeting (#954), Lafayette, Louisiana

PH.D. STUDENTS SUPERVISED AT UIC WITH POST PH.D. JOB

- Gabriel Collado (2025-)
- David Jacobs (2024-)
- Clayton Mizgerd (2024-)
- Emily Cairncross (2022-2026), Project Manager, InWave Renewables
- Sayok Chakravarty (2022-2026)
- Nicholas Spanier (2022-2026)
- Xizhi Liu (2019-2022), Outstanding Thesis Award and Deans Scholar Fellowship at UIC, Postdoctoral researcher, Mathematics Institute, University of Warwick
- Sayan Mukherjee (2017-2021) Researcher and Engineer, blueqat Co., Ltd (quantum computing)
- Alex Cameron (2013–2018) Assistant Professor (NTT), Math Dept, Vanderbilt University
- Lujia Wang (2013–2018), Instructor, Math Dept, University of California at San Diego
- Caroline Terry (2010–2016), Dickson Instructor, Math Dept, University of Chicago
- Randall Stading (2009–2014), Engineer, Epic Systems (health care)
- Jeff Cooper (2010–2014), Deans Scholar Fellowship at UIC, Software Engineer, Google

POSTDOCS MENTORED AT UIC

- Haoran Luo (2025-)
- Liana Yepremyan (2019-20), Mentor and UIC host for Marie Curie Fellowship, currently Assistant Professor, Emory University
- John Lenz (2011–2015)
- Yi Zhao (2003–2006), currently Full Professor at Georgia State University

PH.D. THESIS COMMITTEE

- Jake Maranzatto, UIC (2024)
- Bohdan Kivva, University of Chicago (2022)
- McKinley Meyer UIC (2021)
- Farzane Yahyanejad UIC (2019)
- Mano Vikash Janardhanan UIC (2019)
- Ben Fish, UIC (2018)
- Yi Huang, UIC (2017)

- Jeremy Kuhn, UIC (2015)
- Lakshmi Kaligounder, UIC (2014)
- Dimitris Diochnos, UIC (2013)
- Ken Takata, UIC (2004)
- Christopher Heckman, Georgia Institute of Technology (2000)
- Barrett Walls, Georgia Institute of Technology (1999)

EXTERNAL EXAMINER FOR PH.D. THESIS

- Adam Mammoliti, University of New South Wales (2019)
- Liana Yepremyan, McGill University (2016)
- David Offner, Carnegie-Mellon University (2009)

EXTERNAL EXAMINER FOR HABILITATION

- Mykhaylo Tyomkyn, Charles University, Prague (2023)
- Andrey Kupavskii, Moscow State University, Moscow (2019)

MASTERS THESIS COMMITTEE

- Rachel Snyder, UIC (2022)
- Irina Perepelitsa, UIC (2006)

EXTERNAL EXAMINER FOR PH.D. QUALIFYING EXAM

- Yulun Wang, University of Chicago (2018)
- Bohdan Kivva, University of Chicago (2018)
- John Wilmes, University of Chicago (2012)

INVITED TALKS

- 10/2026: Probabilistic combinatorics at Rutgers conference
- 09/2026: **Buckingham Scholar**, 52nd Miami annual mathematics conference, Oxford, Ohio
- 09/2026: **Plenary Speaker**, 65th MIGHTY meeting, Oxford, Ohio
- 08/2026: Graduate Workshop in Logic and Combinatorics, UIC
- 07/2026: Innovations and Challenges in Extremal Combinatorics conference, Institute for Mathematical Science - National University of Singapore
- 06/2026: Combinatorics Seminar, IIT Bombay
- 05/2026: Research Seminar, Freie University, Berlin
- 12/2025: KOI Combinatorics Lectures, Lexington, Kentucky

- 10/2025: Workshop on Flag algebras and extremal combinatorics, American Institute of Mathematics (AIM), Caltech, Pasadena
- 09/2025: Workshop on Finite Geometry and Ramsey theory, BIRS, Banff, Canada
- 03/2025: Workshop in Algebraic and Analytic Methods in Combinatorics, Simons Laufer Mathematical Sciences Institute, Berkeley
- 02/2025: Online Oxford Discrete Mathematics and Probability Seminar
- 02/2025: ACO seminar, Carnegie-Mellon University
- 11/2024: Combinatorics seminar, Georgia Tech, Atlanta
- 08/2024: Combinatorics seminar, IIT Bombay, India
- 06/2024: Combinatorics seminar, Freie Universität, Berlin, Germany
- 05/2024: Combinatorics seminar, Heidelberg University, Heidelberg, Germany
- 04/2024: 9th Lake Michigan Workshop on Combinatorics and Graph Theory, Western Michigan University, Kalamazoo
- 10/2023: Mathematics Colloquium, Tata Institute of Fundamental Research, Mumbai, India
- 10/2023: ACO seminar, Carnegie-Mellon University
- 09/2023: Combinatorics Colloquium, University of Illinois at Urbana-Champaign
- 09/2023: TetFest60: Probabilistic Trajectories in Algorithms and Combinatorics, Georgia Tech
- 09/2023: **Plenary Speaker**, European Conference on Combinatorics, Graph Theory and Applications (Eurocomb 2023), Prague, Czech Republic
- 05/2023: Seminar, University of Hamburg, Germany
- 05/2023: Atlanta Combinatorics Colloquium, Georgia State University
- 01/2023: Colloquium, Department of Mathematics, Ashoka University, India
- 07/2022: Seminar, Department of Mathematics, Karlsruhe Institute of Technology, Germany
- 06/2022: Third Southwestern German Workshop on Graph Theory, Heidelberg, Germany
- 05/2022: International Workshop on Extremal Combinatorics (IWEC 2022) online Zoom
- 04/2022: Graph theory seminar, Georgia Tech, online Zoom
- 07/2021: **Plenary Speaker**, SIAM Conference on Discrete Mathematics, online Zoom
- 06/2021: **Keynote Speaker**, Minisymposium on Extremal and Probabilistic Combinatorics, 8th European Congress of Mathematicians (ECM), Portoroz, Slovenia, online Zoom
- 06/2021: Round the World Relay in Combinatorics, online Zoom
- 02/2021: Combinatorics Seminar, University of Illinois at Urbana-Champaign, online Zoom
- 12/2020: Extremal Combinatorics Seminar, Rényi Institute, online Zoom
- 12/2020: **Plenary Speaker**, International Conference on Number Theory and Discrete Mathematics (ICNDTM 2020), online Zoom
- 10/2019: Colloquium, Department of Mathematics, University of Notre Dame
- 10/2019: Colloquium, Department of Mathematics, Rutgers
- 08/2019: Combinatorics Seminar, Tata Institute of Fundamental Research, Mumbai, India
- 06/2019: Combinatorics Seminar, Monash University, Melbourne, Australia
- 06/2019: Combinatorics Seminar, University of New South Wales, Sydney, Australia
- 05/2019: **Plenary Speaker**, Conference on graphs, networks, and their applications, Moscow, Russia
- 05/2019: Colloquia in Combinatorics, London School of Economics, London, UK

- 02/2019: 6th Lake Michigan Workshop on Combinatorics and Graph Theory, Western Michigan University, Kalamazoo
- 02/2019: Colloquium, School of Mathematics and ACO, Georgia Tech
- 11/2018: Plenary Speaker, Undergraduate Mathematics Symposium, UIC, Chicago
- 10/2018: AMS Special Session on Probabilistic Methods in Combinatorics, Ann Arbor
- 09/2018: **Plenary speaker**, 7th Polish Combinatorial Conference, Bedlewo, Poland
- 06/2018: Istanbul Center for Mathematical Sciences, Istanbul, Turkey
- 06/2018: Minisymposium on "Extremal problems for sparse graphs and hypergraphs" SIAM conference on Discrete Mathematics, Denver
- 04/2018: Combinatorics Seminar, University of California at San Diego
- 02/2018: Workshop on Extremal Problems in Combinatorial Geometry, BIRS, Banff, Canada
- 01/2018: Workshop on Model Theory and Combinatorics, Institut Henri Poincaré, Paris, France
- 01/2018: International conference in Mathematics, University of Mumbai, Mumbai, India (2 talks)
- 01/2018: Workshop on Extremal and Structural Combinatorics, IMPA, Rio De Janeiro, Brazil
- 10/2017: Colloquium, Department of Mathematical Sciences, University of Delaware
- 07/2017: Seminar, Theoretical Statistics and Mathematical Unit, Indian Statistical Institute, Delhi
- 05/2017: Seminar, School of Mathematical Sciences, University of Science and Technology, Hefei, China
- 05/2017: Seminar, Institute of Mathematics, Hunan University Changsha, China
- 06/2016: Workshop on Probabilistic and Extremal Combinatorics Downunder, Monash University, Melbourne, Australia
- 05/2016: 50 Years of the Hales-Jewett Theorem, Western Washington University, Bellingham
- 04/2016: Colloquium, Monday Lecture (75 mins) of the Research Training Group *Methods for Discrete Structures*, Freie University, Berlin, Germany
- 01/2016: Combinatorics Seminar, Freie University, Berlin, Germany
- 02/2016: 2016 International workshop on Graph theory and Combinatorics Ewha Womans University, Seoul, Korea
- 01/2016: Combinatorics Seminar, University of Illinois at Urbana-Champaign
- 11/2015: **Distinguished Lecture**, Department of Mathematics and Statistics Georgia State University, Atlanta
- 09/2015: Workshop on Extremal and Probabilistic Combinatorics, Birmingham, UK
- 08/2015: Colloquium, School of Mathematics, Tata Institute of Fundamental Research (TIFR) Mumbai, India
- 07/2015: FriezeFest 2015 in honor of the 70th birthday of Alan Frieze (one of nine invited speakers) at the 17th International Conference on Random Structures and Algorithms Carnegie-Mellon University, Pittsburgh
- 06/2015: Combinatorics Seminar, Center for Graph Theory, Combinatorics and Networks Chinese Academy of Sciences, Beijing, China
- 06/2015: Minicourse in "Methods in Extremal Set Theory" (six 90 minute lectures) East China Normal University, Shanghai, China
- 06/2015: Seminar, Shanghai Jiao Tong University, Shanghai, China
- 06/2015: **Plenary Speaker**, Canadian Discrete and Algorithmic Mathematics Conference (CANADAM)

- 03/2015: **Plenary Speaker**, Graduate Student Combinatorics Conference
  University of Kentucky, Lexington
- 03/2015: **Plenary Speaker**, 2nd Lake Michigan Workshop on Combinatorics and Graph Theory,
  (one of two Plenary Speakers giving three 50 minute tutorials), Notre Dame, Indiana
- 07/2014: Workshop in Extremal Combinatorics, ICMS, Edinburgh
- 06/2014: Westfest (conference in honor of Doug West's 60th birthday), IMA, Minneapolis
- 05/2014: Workshop in Graph Theory, Zhejian Normal University, Jinhua, China
- 05/2014: Combinatorics Seminar, East China Normal University, Shanghai, China
- 04/2014: Combinatorics Seminar, KTH, Stockholm
- 04/2014: Combinatorics Seminar, Mittag Leffler, Stockholm
- 02/2014: Combinatorics Seminar, MIT, Boston
- 02/2014: Colloquium, Emory University, Atlanta
- 01/2014: Workshop in Combinatorics, Oberwolfach, Germany
- 12/2013: ACO seminar, Carnegie-Mellon University, Pittsburgh
- 11/2013: **Featured Speaker (two 50 min talks)**, Atlanta Lecture Series in Combinatorics and Graph Theory X, Emory University, Atlanta
- 10/2013: Combinatorics Seminar, Ohio State University, Columbus
- 08/2013: Computer Science Seminar, Indian Institute of Technology (IIT) Bombay, India
- 07/2013: Seminar, Indian Statistical Institute (ISI), Delhi, India
- 07/2013: Erdős Centennial Conference, Budapest, Hungary
- 04/2013: Combinatorics and Graph Theory Seminars (2 talks), Georgia Tech, Atlanta
- 04/2013: Theory Seminar, Department of Computer Science, University of Chicago
- 04/2013: Colloquium, Dept of Math, Stats, and Comp Sci, UIC
- 03/2013: Conference on Extremal Combinatorics at Illinois (EXCILL2), Urbana
- 03/2013: Discrete Math Seminar, Institute for Advanced Study, Princeton
- 01/2013: Workshop in Extremal and Probabilistic Combinatorics, IPAM, UCLA
- 12/2012: Conference on Recent Trends in Discrete Mathematics,
  Tata Institute of Fundamental Research (TIFR), Mumbai, India
- 12/2012: Seminar, Indian Statistical Institute (ISI), Delhi, India
- 10/2012: Combinatorics Seminar, Queen Mary University of London, UK
- 09/2012: Colloquium, Western Michigan University, Kalamazoo
- 09/2012: ICTP-IPM Workshop and Conference in Combinatorics and Graph Theory, Trieste, Italy
- 08/2012: New Trends and Directions in Combinatorics, Banff, Canada
- 07/2012: Midsummer Combinatorial Workshop XVIII, Prague, Czech Republic
- 05/2012: Conference honoring the 50th birthday of Robin Thomas, Georgia Tech, Atlanta
- 12/2011: Colloquium, University of Illinois at Urbana Champaign
- 10/2011: Plenary talk, Undergraduate Mathematics Symposium, UIC, Chicago
- 07/2011: Midsummer Combinatorial Workshop XVII, Prague, Czech Republic
- 05/2011: Minisymposium in Extremal Graph Theory, CanaDAM 2011, Victoria, Canada
- 05/2011: **Main Speaker (one of four)**, 24th Cumberland Conference on Combinatorics, Graph Theory, and Computing, University of Louisville

- 05/2011: 2011 Erdős conference, Memphis
- 03/2011: AIM workshop on Hypergraph Turán Problem (organizer)
- 02/2011: Colloquium, University of California at San Diego
- 01/2011: Workshop in Combinatorics, Oberwolfach, Germany
- 11/2010: AMS Special Session on Graph Theory, Notre Dame
- 10/2010: AMS Special Session on Extremal and Probabilistic Combinatorics, UCLA
- 09/2010: ICM 2010 Satellite Conference On Algebraic and Probabilistic Aspects of Combinatorics and Computing, Bangalore, India
- 08/2010: Guest Lecturer in Combinatorics, Department of Computer Science and Engineering, Indian Institute of Technology (IIT) Bombay, Mumbai, India
- 08/2010: Seminar, Tata Institute of Fundamental Research (TIFR), Mumbai, India
- 07/2010: Midsummer Combinatorial Workshop XVI, Prague, Czech Republic
- 06/2010: Minisymposium on Extremal Graph Theory, SIAM Conference on Discrete Mathematics, Austin
- 05/2010: Focused Research Group on Sparse Pseudorandom Structures, Banff, Canada
- 04/2010: Colloquium, Ohio State University, Columbus
- 03/2010: Combinatorics, Groups, Algorithms, and Complexity, Conference in honor of Laci Babai's 60th birthday, Ohio State University, Columbus
- 02/2010: Workshop in Graph Theory and Combinatorics in Memory of Uri Peled, UIC, Chicago
- 11/2009: Workshop on topics in graphs and hypergraphs, IPAM, UCLA, Los Angeles
- 10/2009: Colloquium, Arizona State University, Tempe
- 10/2009: Combinatorics Seminar, Arizona State University, Tempe
- 09/2009: Combinatorics Seminar, Emory University, Atlanta
- 08/2009: Workshop on extremal and probabilistic combinatorics, Banff, Canada
- 07/2009: SIAM Annual Meeting, special session in honor of Danny Kleitman's 75th birthday, Denver
- 06/2009: ASCEND Colloquium; talk given to high school students selected as Assuring STEM Credential Expansion through Nurturing Diversity (ASCEND) scholars to study at UIC
- 03/2009: AMS Special Session on Extremal and Probabilistic Combinatorics, Urbana
- 02/2009: Theory Seminar, University of Chicago, Chicago
- 12/2008: Computer Science Seminar, Indian Institute of Technology, Bombay, India
- 10/2008: Colloquium, Illinois Institute of Technology, Chicago
- 06/2008: Joint AMS/Brazilian Mathematical Society Special Session on extremal and probabilistic combinatorics, Rio de Janeiro, Brazil
- 06/2008: SIAM conference in Discrete Mathematics, Burlington
- 05/2008: New Directions in Algorithms, Combinatorics, and Optimization (conference in honor of Tom Trotter's 65th birthday), Atlanta
- 01/2008: Colloquium, Monday Lecture (75 mins) of the Research Training Group *Methods for Discrete Structures*, Humboldt University, Berlin, Germany
- 01/2008: Workshop in Combinatorics, Oberwolfach, Germany
- 06/2007: CMS-MITACS Joint Conference 2007, Winnipeg, Canada
- 05/2007: 1st Canadian Discrete and Algorithmic Mathematics Conference

(CANADAM 2007), Banff, Canada

- 04/2007: Colloquium, Carnegie Mellon University, Pittsburgh
- 03/2007: AMS Special Session on graph theory, Miami University, Ohio
- 03/2007: Combinatorics Seminar, McGill University, Montreal, Canada
- 01/2007: Colloquium, Georgia State University, Atlanta
- 11/2006: Pure Mathematics Seminar, Queen Mary University of London
- 11/2006: Pure Mathematics Seminar, University College London
- 11/2006: Combinatorics Seminar, University of Cambridge
- 11/2006: EXCILL: Conference on Extremal Combinatorics at Illinois, Urbana
- 10/2006: Workshop in Combinatorics, Probability and Computing, Oberwolfach, Germany
- 06/2006: SIAM conference in Discrete Mathematics, Victoria, Canada
- 05/2006: Colloquium, Indian Institute of Technology (IIT), Bombay, India
- 04/2006: Colloquium, Iowa State University, Ames
- 04/2006: Workshop em Fundamentos da Ciencia da Computacao: Algoritmos Combinatorios e Estruturas Discretas, IMPA, Rio de Janeiro, Brazil
- 03/2006: 2006 Erdős conference, Memphis
- 01/2006: Workshop in Combinatorics, Oberwolfach, Germany
- 12/2005: Joint AMS/Taiwanese Mathematical Society Special Session on graph coloring, Taichung, Taiwan
- 11/2005: Combinatorics Seminar, Mumbai University, Mumbai, India
- 11/2005: Discrete Math Seminar, Princeton University, Princeton
- 10/2005: Discrete Math Seminar, Carnegie Mellon University, Pittsburgh
- 10/2005: AMS Special Session on extremal and probabilistic combinatorics, Annandale-on-Hudson
- 10/2005: AMS Special Session on graph theory, Lincoln
- 09/2005: Colloquium, Tata Institute of Fundamental Research, Mumbai, India
- 05/2005: WaterMellon workshop on extremal graph theory, Carnegie Mellon University
- 02/2005: Combinatorics Seminar, California Institute of Technology, Pasadena
- 05/2004: Combinatorics Seminar, University of Delaware, Newark
- 03/2004: Colloquium, Emory University, Atlanta
- 03/2004: Combinatorics Seminar, Georgia Tech, Atlanta
- 03/2004: Colloquium, University of Louisville, Louisville
- 11/2003: Seminar, Ohio State University, Columbus
- 10/2003: Seminar, Carnegie Mellon University, Pittsburgh
- 08/2003: Seminar, Indian Institute of Technology, Bombay, India
- 06/2003: Conference in honor of Miklós Simonovits, Csopak, Hungary
- 05/2003: Focused Research Group, Banf Center, Alberta, Canada
- 03/2003: Combinatorics Seminar, Rényi Institute, Budapest, Hungary
- 01/2003: Combinatorics Seminar, Microsoft Research, Redmond
- 10/2002: Combinatorics Seminar, University of Illinois, Urbana
- 08/2002: SIAM Conference in Discrete Mathematics, San Diego

- 01/2002: Workshop in Combinatorics, Oberwolfach, Germany
- 06/2001: Conference on Hypergraphs, Rényi Institute, Budapest
- 02/2001: Colloquium, Colorado State University, Fort Collins
- 02/2001: Colloquium, Drexel University, Philadelphia
- 02/2001: Colloquium, University of Kentucky, Lexington
- 02/2000: Combinatorics Seminar, University of Waterloo, Canada
- 02/2000: Colloquium, Clemson University, Clemson
- 02/2000: Colloquium, University of Pittsburgh, Pittsburgh
- 08/1999: DREI workshop on graphs, posets, and algorithms, DIMACS
- 05/1999: Twelfth Cumberland Conference, University of Louisville, Louisville
- 03/1999: AMS Special Session in Graph Theory, University of Illinois, Urbana

PUBLICATIONS

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SUBMITTED FOR PUBLICATION

- Rainbow subgraphs of star-coloured graphs (with Allan Lo, Klas Markstrom, Katherine Staden, Maya Stein, Lea Weber) (32 pages)
- K_4^--free triple systems without large stars in the complement (with Nicholas Spanier) (35 pages)
- Semi-Inducibility of some small graphs (with Jozsef Balogh, Bernard Lidicky, Florian Pfender, Jan Volec) (25 pages)

- The largest K_r-free set of vertices in a random graph (with Tom Bohman, Marcus Michelen) (30 pages)
- 4/9 is a non-jump for 3-graphs (with Xizhi Liu) (12 pages)
- On the maximum density of r-graphs in which every $(r+1)$-set spans 0 or 2 edges (with Vishesh Jain, Haoran Luo) (12 pages)