Curriculum Vitae

Péter Pál Pach

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Personal Data

Name: Péter Pál Pach
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Studies

2009–2012: PhD in Theoretical Mathematics, Eötvös Loránd University (ELTE), Budapest
2004–2009: MSc in Mathematics, Eötvös Loránd University (ELTE), Budapest

Affiliation

2019–present head of the MTA-BME Lendület Arithmetic Combinatorics Research group
2022–present Department of Computer Science and Information Theory, Budapest University of Technology and Economics (BME), senior research fellow
2017–2022 Department of Computer Science and Information Theory, Budapest University of Technology and Economics (BME), associate professor
2017–2018 DIMAP, University of Warwick, research fellow (advisor: Dan Král')
2013–2017 Department of Computer Science and Information Theory, Budapest University of Technology and Economics (BME), assistant professor
2012–2013 Department of Computer Science and Information Theory, Budapest University of Technology and Economics (BME), assistant lecturer

Teaching

2015– Aquincum Institute of Technology (AIT), in English
2012– Budapest University of Technology and Economics (BME), in Hungarian and in English
2012– Budapest Semesters in Mathematics (BSM), in English
2006-2013 Eötvös Loránd University (ELTE), in Hungarian

Talks

1. ÖMG Tagung, Graz, 2023 (invited)

2. Combinatorial and Additive Number Theory, New York, 2023

3. 12th Japanese-Hungarian Symposium on Discrete Mathematics and Its Applications, Budapest, 2023

4. Southeastern International Conference on Combinatorics, Graph Theory & Computing, Boca Raton, 2023

5. Aart and Combinatorics, Nesin Mathematics Village (Turkey), 2023

6. Workshop on Additive Combinatorics and Algebraic Connections, Princeton, IAS, 2022 (invited)

7. Masaryk University, Mathmetics Colloqium, Brno, 2022

8. Discrete Mathematics Days, Santander, 2022

9. Nordic Combinatorial Conference, Tromso, 2022

10. Combinatorial and Additive Number Theory, New York (online), 2022

11. Colloquium on the occasion of Christian Elsholtz' 50(+1)th birthday, Graz, 2022 (invited)

12. Interfaces of the Theory of Combinatorial Limits, Budapest, 2022

13. Southeastern International Conference on Combinatorics, Graph Theory & Computing, Boca Raton, 2022

14. The 1st Workshop on Developments in Combinatorics, Shandong University (online), 2021 (invited)

15. Virtual Discrete Math Colloquium, DIMAG, South Korea (online), 2021 (invited)

16. EuroComb, Barcelona (online), 2021 (prize lecture)

17. Developments in Computer Science, Budapest (online), 2021 (invited)

18. Combinatorial and Additive Number Theory, New York (online), 2021

19. 7th International Conference on Uniform Distribution Theory, Linz (online), 2021 (invited)

20. Additive Combinatorics, CIRM, Luminy (hybrid), 2020 (invited)

21. Combinatorial and Additive Number Theory, New York (online), 2020

22. One day Meeting on Extremal Combinatorics, EWHA University, Seoul, 2020 (invited)

23. Zero-Sum Ramsey Theory: Graphs, Sequences and More, Oaxaca, 2019 (invited)

24. IBS One-Day Conference on Extremal Graph Theory, Daejeon, 2019 (invited)

25. The 11th Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications, Tokyo, 2019 (invited)

26. London Colloquia in Combinatorics, 2019 (invited)

27. FU Berlin, Colloquium, 2019 (invited)

28. One day workshop on Extremal Combinatorics, EWHA University, Seoul, 2019 (invited)

29. Additive combinatorics, Linz, 2018 (invited)

30. Mathematics Colloquium, TU Graz, 2018 (invited)

31. Arithmetic Ramsey Theory in Manchester, 2018 (invited)

32. Prague Summer School on Discrete Mathematics 2018 (invited lecture series)

33. The Joint International Meeting of the Chinese Mathematical Society and the American Mathematical Society, 2018 (invited)

34. Combinatorial and Additive Number Theory, New York, 2018

35. 10 Year Anniversary DIMAP Workshop, University of Warwick, 2017

36. Workshop on Algebraic Methods in Combinatorics, Harvard, 2017 (invited)

37. Vilnius Conference in Combinatorics and Number Theory, Vilnius, 2017

38. Journées Arithmétiques, Caen, 2017

39. CanaDAM, Toronto, 2017 (invited minisymposium talk)

40. 10th Japanese-Hungarian Symposium on Discrete Mathematics and Its Applications, Budapest, 2017

41. Polynomial method workshop, Jerusalem, 2016 (invited)

42. Polynomial method workshop, Bristol, 2016 (invited)

43. Conference on elementary and analytic number theory, Strobl am Wolfgangsee, 2016

44. Combinatorial and Additive Number Theory, New York, 2016

45. Additive Combinatorics in Bordeaux, 2016

46. Combinatorial and Additive Number Theory, Graz, 2016

47. 9th Hungarian-Japanese Symposium on Discrete Mathematics and its Applications, Fukuoka, 2015

48. Summit:240 Conference, Budapest, 2014

49. International colloquium on graph theory and combinatorics, Grenoble, 2014

50. Paul Turán Memorial Conference, Budapest, 2011

51. Artic Number Theory School, Helsinki, 2011

52. International Congress of Mathematicians (Poster section), Hyderabad, India, 2010

53. Number Theory and its Applications, Debrecen, 2010

54. Summer School on General Algebra and Ordered Sets, Malenovice, 2010

55. International Conference on Algebras and Lattices, Prague, 2010

56. Combinatorics, Groups, Algorithms, and Complexity, Columbus, Ohio, 2010

Seminar Talks

1. TU Graz, Number Theory Colloquium, 2022

2. Bordeaux, Graph Theory Seminar, 2022

3. University of Warwick, Combinatorics Seminar, 2022

4. Virtual Algebraic Graph Theory Seminar, University of Waterloo, 2022 (online)

5. Rényi Institute, Algebra Seminar, 2021

6. TU Graz, Number theory seminar, 2021 (hybrid)

7. Rényi Institute, Number Theory Seminar, 2021 (online)

8. University of Bristol, Combinatorics Seminar, 2021 (online)

9. Extremal and Probabilistic Combinatorics Webinar, 2020

10. Masaryk University, Brno, Joint DIMEA and FORMELA Seminar, 2019

11. University of Warwick, Combinatorics Seminar, 2019

12. University of Warwick, DIMAP Seminar, 2019

13. University of Birmingham, Combinatorics Seminar, 2019

14. FU Berlin, Combinatorics Seminar, 2019

15. Rényi Institute, Number Theory Seminar, 2018

16. University of Bristol, Heilbronn Number Theory Seminar, 2018

17. University of Bristol, Combinatorics Seminar, 2018

18. University of Warwick, DIMAP Seminar, 2017

19. University of Birmingham, Combinatorics Seminar, 2017

20. London School of Economics, Seminar on Combinatorics, Games and Optimisation, 2017

21. University of Warwick, Combinatorics Seminar, 2017

22. PTE, Mathematics Seminar, 2017

23. ELTE, Analysis Seminar, 2016

24. ELTE, Finite Geometry Seminar, 2016

25. Rényi Institute, Combinatorics Seminar, 2016

26. Rényi Institute, Number Theory Seminar, 2016

27. BME, SZIT Seminar, 2012

28. ELTE, Algebra Seminar, 2011

29. ELTE, Algebra Seminar, 2009

Prizes, scholarships

1. Paul Erdős Prize (2023)

2. European Prize in Combinatorics (2021)

3. Bolyai plaquette (2020)

4. Excellent Teacher of the Faculty, silver degree (2016)

5. János Bolyai Research Scholarship (2015-2019)

6. Géza Grünwald Commemorative Prize (2015)

7. Erdős Pál Young Researcher Scholarship (2014)

8. Honourable Mention of the Dean (2013)

9. Sport and Education Scholarship (2011)

10. International Mathematics Competition for University Students, First prize, member of the winning team of ELTE (Blagoevgrad, 2008)

11. Excellent Student of the Faculty Award (2008)

12. Vojtěch Jarník International Mathematical Competition, 8th place (Ostrava, 2008)

13. Miklós Schweitzer Memorial Competition, honourable mention (2007)

14. International Mathematics Competition for University Students, First prize, member of the winning team of ELTE (Blagoevgrad, 2007)

15. Fellowship granted by the Republic of Hungary (2007-2008)

16. Miklós Schweitzer Memorial Competition, Third Prize (2006)

17. International Mathematics Competition for University Students, First prize (Odessa, 2006)

18. Vojtěch Jarník International Mathematical Competition, 4th place (Ostrava, 2006)

19. Operation Research Competition, First Prize (2005)

20. Miklós Schweitzer Memorial Competition, honourable mention (2005)

21. International Mathematics Competition for University Students, First prize (Blagoevgrad, 2005)

22. Fazekas Medal of Honour (2004)

23. Scholarship of the Prime Minister of Hungary (2005)

24. Scholarship of the Prime Minister of Hungary (2004)

25. International Mathematical Olympiad, First Prize (Athens, 2004)

26. International Mathematical Olympiad, Second Prize (Tokyo, 2003)

Research projects

1. Lendület (Momentum) Grant (2019-2024), MTA-BME Arithmetic Combinatorics Research Group, principal investigator

2. Hungarian Scientific Research Fund (NKFIH) K129335 Additive problems (2019-2022), investigator

3. Hungarian Scientific Research Fund (NKFIH) K124171 Optimal Mapping of Communication Services onto Cloud Computing Architectures Based on Discrete Mathematical Methods (2017-2021), investigator

4. Hungarian Scientific Research Fund (OTKA) PD115978 Applications of Combinatorics in Multiplicative Number Theory (2015-2019), principal investigator

5. Hungarian Scientific Research Fund (OTKA) K108947 Optimization Methods for Cloud Computing and Communications (2013-2018), investigator

6. Hungarian Scientific Research Fund (OTKA) NK67867 Discrete and Continuous: interfaces between graph theory, algebra, analysis and geometry (2010), investigator

Role in Scientific Community

1. 2020–present editor of Studia Scientiarum Mathematicarum Hungarica

2. 2005–present: member of the Editorial Board of Kömal

3. 2009–present: member of the Kürschák Competition Committee, from 2019 the chair of the committee

4. 2014–present: member of the Hungarian National Mathematical Olympiad (OKTV) Committee, from 2021 the chair of the committee

5. refereeing for Acta Arithmetica, Acta Mathematica Hungarica, Advances in Mathematics, Australasian Journal of Combinatorics, Bulletin of the London Mathematical Society, Combinatorica, Colloquium Mathematicum, Demonstratio Mathematica, Discrete Applied Mathematics, Discrete Mathematics, European Journal of Combinatorics, Finite Fields and their Applications, Forum of Mathematics Sigma, Integers, Israel Journal of Mathematics, Journal of Number Theory, Journal of Combinatorial Theory Series A, Mathematische Annalen, Linear Algebra and Its Applications, Mathematische Nachrichten, Proceedings of the American Mathematical Society, Proceedings of the London Mathematical Society
reviewing for MathSciNet and Zentralblatt

6. 2021–present: member of the Hungarian Young Academy (FKA)