

Dimitris Koukoulopoulos

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EMPLOYMENT

Université de Montréal, Associate Professor, since 2017.

Université de Montréal, Assistant Professor, 2012-17.

Centre de recherches mathématiques, Montreal, Postdoctoral Fellow, 2010-12.

VISITING POSITIONS

Mathematical Sciences Research Institute, Berkeley, research member, Spring 2017.

EDUCATION

University of Illinois at Urbana-Champaign, Ph.D. in Mathematics, 2010

University of Illinois at Urbana-Champaign, M.S. in Mathematics, 2007

Aristotle University of Thessaloniki, Greece, B.S. in Mathematics, 2006

RESEARCH INTERESTS

Multiplicative and probabilistic number theory, anatomy of integers and permutations, sieve methods, additive combinatorics.

GRANTS

Projet de recherche en équipe (with. C. David, M. Lalin and M. Radziwiłł), Fonds de recherche du Québec – Nature et technologies, 2018-21.

Discovery grant, Natural Sciences and Engineering Research Council of Canada, 2013-18 and 2018-23.

Établissement de nouveaux chercheurs universitaires, Fonds de recherche du Québec – Nature et technologies, 2015-17.

Start-up grant, Université de Montréal, 2012-15.

AWARDS

Paul R. Halmos - Lester R. Ford Award, joint with Johann Thiel for the article *Arrangements of stars on the American flag*, Mathematical Association of America, 2013.

CRM-ISM Postdoctoral Fellowship, Centre de recherches mathématiques, Montreal, 2010-12.

Bateman Prize in Number Theory, University of Illinois at Urbana-Champaign, 2010.

Bateman Fellowship in Number Theory, University of Illinois at Urbana-Champaign, 2009.

Bronze Medal, Mediterranean Mathematical Olympiad, 2002.

Bronze Medal, National Mathematical Olympiad, Greece, 2002.

PAPERS

1. *Sieve weights and their smoothings* (with A. Granville and J. Maynard). 86 pages, submitted for publication.
2. *Beyond the LSD method for the partial sums of multiplicative functions* (with A. Granville), **Ramanujan J.**, 26 pages, to appear.
3. *The frequency and the structure of large character sums* (with J. Bober, L. Goldmakher and A. Granville). **J. Eur. Math. Soc. (JEMS)**, 20 (2018), no. 7, 1759–1818.
4. *Sums of Euler products and statistics of elliptic curves* (with C. David and E. Smith). **Math. Ann.**, 368 (2017), 685–752.
5. *Permutations contained in primitive subgroups* (with S. Eberhard and K. Ford). **Discrete Analysis**, 2016:12, 34 pp.
6. *The frequency of elliptic curve groups over prime finite fields* (with V. Chandee, C. David and E. Smith); with an appendix by C. David, G. Martin and E. Smith. **Canad. J. Math.**, 68 (2016), 721–761.
7. *Best possible densities, as a consequence of Zhang-Maynard-Tao* (with A. Granville, D. M. Kane and R. Lemke Oliver). **Analytic Number Theory. In Honor of Helmut Maier's 60th Birthday**. pp. 133–144, Springer, Cham, 2015.

8. *Primes in short arithmetic progressions*. **Int. J. Number Theory**, 11 (2015), no. 5, 1499–1521.
9. *When the sieve works* (with A. Granville and K. Matomäki). **Duke Math. J.**, 164 (2015), no. 10, 1935–1969.
10. *Group structures of elliptic curves over finite fields*. (with V. Chandee, C. David and E. Smith). **Int. Math. Res. Not. IMRN**, 2014, no. 19, 5230–5248.
11. *On the concentration of certain additive functions*. **Acta Arith.** 162 (2014), 223–241.
12. *On the number of integers in a generalized multiplication table*. **J. Reine Angew. Math.** 689 (2014), 33–99.
13. *On multiplicative functions which are small on average*. **Geom. Funct. Anal.**, 23 (2013), no. 5, 1569–1630.
14. *Pretentious multiplicative functions and the prime number theorem for arithmetic progressions*. **Compos. Math.**, 149 (2013), no. 7, 1129–1149.
15. *Arrangements of stars on the American flag* (with J. Thiel). **Amer. Math. Monthly**, 119 (2012), no. 6, 443–450.
16. *Divisors of shifted primes*. **Int. Math. Res. Not. IMRN**, 2010, no. 24, 4585–4627.
17. *Localized factorizations of integers*. **Proc. London Math. Soc. (3)** 101 (2010), no. 2, 392–426.
18. *A reciprocity theorem for certain hypergeometric series* (with B. C. Berndt). **Proc. Amer. Math. Soc.** 137 (2009), 2369–2373.

BOOKS

1. *The distribution of prime numbers*, accepted for publication in the book series *Graduate Studies in Mathematics* of the Amer. Math. Society.

SELECTED INVITED LECTURES

Canadian Number Theory Association XV Meeting, Laval University, July 2018.

Tufts University, March 2018.

University of Georgia, March 2018.

Automorphic forms and arithmetic, Oberwolfach, September 2017.

Connections for Women: Analytic Number Theory, MSRI, Berkeley, February 2017.

Deshouillers 70, Kerala School of Mathematics, India, January, 2017.

Analytic Number Theory, Oberwolfach, November 2016.

Pomerance 71, University of Georgia, Athens, GA, June 2015.

University of Illinois at Urbana-Champaign, April 2015.

Analytic Number Theory, Clay Mathematics Institute, Oxford, October 2014.

University of Bristol, September 2014.

Henri Poincare Institute, Paris, September 2014.

Canadian Number Theory Association XIII Meeting, University of Ottawa, June 2014.

Number Theory at Illinois, University of Illinois at Urbana-Champaign, June 2014.

Dartmouth College, May 2014.

CRM-ISM colloquium, Montreal, March 2014.

Stanford University, March 2014.

Ohio State University, January 2013.

Analytic Number Theory, Oberwolfach, October 2013.

Fouvry 60, Centre international de Rencontres Mathématiques, Luminy, June 2013.

Fields Institute, Toronto, November 2012.

Canadian Number Theory Association XII Meeting, University of Lethbridge, June 2012.

Joint Mathematical Meetings, Boston, MA, January 2012.

Stanford University, November 2011.

Ellie Cartan Institute, Nancy-Metz, October 2011.

Henri Poincare Institute, Paris, October 2011.

L-functions and applications, University of Calgary, June 2011.

POSTDOC SUPERVISION

1. Alexander (Sacha) Mangerel, 2018-20.
2. Xianchang Meng, 2017-18.
3. Corentin Perret-Gentil-Dit-Maillard, 2017-19.
4. Niko Laaksonen, 2017-18.
5. Mattia Righetti, 2016-18.
6. Stephen Lester, 2016-17.
7. Sumit Giri, 2015-16.
8. Alastair Irving, 2014-15.
9. Marc Munsch, 2014-15.

PHD STUDENTS

1. Stylianos Sachpazis, since September 2018.
2. Peter Zenz (co-supervised with Maksym Radzwill), since September 2017.
3. Kunjakanan Nath, since September 2016.
4. Crystel Bujold (co-supervised with Andrew Granville), since January 2014.
5. Marzieh Mehdizadeh (co-supervised with Andrew Granville), 2014-17.

MASTERS STUDENTS

1. Tony Haddad, since September 2018.
2. Joëlle Matte, January 2016 - December 2018.
3. Peter Zenz (co-supervised with Maksym Radzwill), Fall 2016.
4. Antoine Comeau-Lapointe, September 2014 - August 2016.

UNDERGRADUATE STUDENTS

1. Antoine Giard, Summer 2016.
2. Youcef Mokrani, Summer 2016.
3. Mathieu Nassif, Summer 2015.
4. Fabrice Nonez, Summer 2015.
5. Vincent Girard (co-supervised with M. Lalín), Summer 2013.
6. Manuela Piñeros-Rodriguez (co-supervised with M. Hamel), Summer 2013.
7. Patrick Da Silva (co-supervised with A. Granville), Summer 2012.
8. Suryateja Gavva (co-supervised with A. Granville), Summer 2012.
9. Olivier Martin (co-supervised with A. Granville), Summer 2012.
10. Philippe Charron, Summer 2011.

Last updated: December 21, 2018