

Education

- 2011–2015 **Ph.D in Mathematics**, *Tel-Aviv University*, **Advisor:** Lior Bary-Soroker.
- 2004–2007 **M.A in Mathematics**, *Technion- Israel institute of technology*, **Advisor:** Raphael Loewy.
- 2000–2004 **B.A in Mathematics and Computer science**, *Technion- Israel institute of technology*.

Academic and Professional Experience

- 2015 -today **Postdoctoral Assistent Professor**, *University of Michigan*.
- 2010 **Freelance writer**.
- 2007–2009 **Software engineer**, *IBM, R&D labs, Israel*.
- 2004–2006 **Software engineer**, *RAFAEL- Armament Development Authority Ltd*.
- 2003–2004 **Track and Field Coach**, *Technion- Israel institute of technology*.
Coach and assistant coach at the athletics team of the Technion

Publications

- Prime polynomials in short intervals and in arithmetic progressions**, *Efrat Bank, Lior Bary-Soroker, and Lior Rosenzweig*, *Duke Math.J.*164 (2015), no.2, 277–295..
- Prime polynomial values of linear functions in short intervals**, *Efrat Bank and Lior Bary-Soroker*, *Journal of Number Theory* 151 (2015), pp. 263-275.
- Solution of Cassels Problem on a Diophantine Constant over Function Fields**, *Efrat Bank, Erez Nesharim and Steffen Hojris Pedersen*, *International Mathematics Research Notices* 2016, doi: 10.1093/imrn/rnw169.
- Sums of two squares in short intervals in polynomial rings over finite fields**, *Efrat Bank, Lior Bary-Soroker and Arno Fehm*, To Appear, *American Journal of Mathematics*, arXiv:1509.02013.
- Primes in short intervals on curves over finite fields**, *Efrat Bank, Tyler Foster*, Submitted, arXiv:1701.06822.
- Correlation between primes in short intervals on curves over finite fields**, *Efrat Bank, Tyler Foster*, In preperation.

Non-Mathematics Publications

- 2014 **One Morning**, *Efrat Bank Illustration: Julia Filipona-Erez*, Matar Publishing house.
- 2012 **The Best For The Fish**, *Efrat Bank Illustration: Julia Filipona-Erez*, Matar Publishing house.

Grants

- 2016-2018 **AMS-Simons travel**, *AMS-Simons Foundation*.

- 2015-2017 **Shulamit Aloni Fellowship** , *Israel ministry of Science, Technology and Space.*
2014 **Promoting Women in Science Grant** , *Israel ministry of Science, Technology and Space.*

Teaching experience

- 2015–today **Course instructor**, *University of Michigan.*
Among the courses I taught are Calculus I, Elementary Number Theory and Linear Algebra.
- 2010–2015 **Teaching assistant**, *Tel-Aviv University.*
Among the courses I TAed are Linear Algebra I, Linear Algebra II, Galois Theory and Calculus II.
- 2004–2007 **Teaching assistant**, *Technion.*
Among the courses I TAed are Linear Algebra I and Mathematics for Medicine students.

Conferences talks

- 2017 **Number Theory in Function Fields**, *April 2017, University of Bristol, Bristol, UK.*
- 2016 **Palmetto Number Theory Series**, *December 2016, University of South Carolina, Columbia, SC.*
- 2015 **French-German Summer School, Galois Theory and Number Theory**, *July 2015, Konstanz, Germany.*
- 2014 **Field Arithmetic and Number Theory**, *September 2014, Tel-Aviv university, Isreal.*

Seminar talks

- 2017 **Number Theory Seminar**, *University of Washington, Seattle, Washington.*
Number Theory Seminar, *Duke University, Durham, NC.*
- 2016 **Number Theory Seminar**, *University of Wisconsin, Madison, Wisconsin.*
Quebec-Vermont Number Theory Seminar, *Montreal, Canada.*
- 2015 **Algebraic Geometry and Representation Theory Seminar**, *Weizmann Institute of Science, Isreal.*
Algebra Seminar, *The Technion, Isreal Institute of Technology, Isreal.*
Algebra Seminar, *University of Pennsylvania, USA.*
Number Theory Seminar, *University of Illinois at Chicago, USA.*
Group, Lie and Number Theory Seminar, *University of Michigan, USA.*
Amitsur Algebra Seminar, *The Hebrew University of Jerusalem, Isreal.*
Algebra Seminar, *The University of Haifa, Isreal.*
Algebra Seminar, *Bar-Ilan University, Isreal.*
- 2014 **Number Theory seminar**, *Tel-Aviv University, Isreal.*
Field arithmetic seminar, *Tel-Aviv University, Isreal.*
- 2013 **Field arithmetic seminar**, *Tel-Aviv University, Isreal.*
- 2012 **Field arithmetic seminar**, *Tel-Aviv University, Isreal.*

Attended conferences

- 2017 **WIN 4**, *August 2017, Banff, Canada.*
Introductory Workshop: Analytic Number Theory, *February 2017, MSRI, USA.*
- 2016 **re:boot Number Theory**, *March 2016, Duke University, USA.*

- Ergodic, Algebraic and Combinatorial Methods in Dimension Theory Workshop**,
February 2016, ICERM, Brown University , USA.
- 2014 **Statistics and number theory**, *September 2014*, CRM, Universite de Montreal, Canada.
AMS-IMU second joint meeting, *June 2014*, Bar-Ilan and Tel-Aviv universities, Israel.
Number fields and function fields: coalescences, contrasts and emerging applications, *May 2014*, The Royal Society at Chicheley Hall, UK.
- 2013 **L-functions, Spectra and Equidistribution**, *December 2013*, The Hebrew University of Jerusalem, Isreal.
- 2012 **Winter school on Galois theory**, *February 2012*, Luxembourg, Luxembourg.
Amitsur Symposium, *June 2012*, Tel-Aviv University, Israel.