

Yuri F. Bilu' Curriculum Vitae

August 2021

Born on August 29, 1964 in Minsk, of French and Israeli citizenship.

Education

Habilitation University of Basel, 2000
Ph. D. Ben-Gurion University of the Negev, Beer-Sheva, Israel, 1994
B. Sc. & M. Sc. Byelorussian State University, Minsk, 1986

Employment History

Since 2000 Professor of Mathematics, Université de Bordeaux
1998 – 2000 Assistant (Privat-Dozent since June 2000), Universität Basel
1997 – 1998 Lise-Meitner Scholar, TU Graz
1996 – 1997 Researcher, Forschungsinstitut für Mathematik, ETH Zürich
1995 – 1996 Researcher, Max-Planck-Institut für Mathematik, Bonn
1994 – 1995 Researcher, Universität Göttingen
1993 – 1994 Researcher, Université Bordeaux 2
1990 – 1993 Teaching assistant, Ben-Gurion University
1986 – 1990 Programmer, "Belgosproject", Minsk

Short Visits

I was long-term (one month or longer) visiting professor or researcher in the following institutions:

MPIM, Bonn	Universität Basel	Wits University
ESI, Vienna	Byelorussian State University	IMSc, Chennai
Stellenbosch University	CRM Montréal	Xiamen University
UNAM, Morelia	TU Graz	University of Valparaiso
Hausdorff Institute, Bonn	Chennai Mathematical Institute	Humboldt Universität
SNS Pisa	Università di Pisa	IMPA, Rio de Janeiro
FIM, ETH Zürich	Karl-Franzens-Universität, Graz	Macquarie University
Fields Institute, Toronto	Universität Bielefeld	

I was invited speaker on about 75 conferences, and gave about more than 20 mini-courses at various institutions or instructional schools throughout the world.

Conference and other activities organizer

- Co-organizer of the conference "La grandezza dei punti piccoli" (Pisa, May 2022)
- Co-organizer of the conference "Explicit Number Theory" (Valparaiso, January 2019)
- Co-organizer of the CIMPA School "Explicit Number Theory" (Johannesburg, January 2018)
- Co-organizer of the conference "Journées Algophantiennes Bordelaises" (Bordeaux, June 2017)
- Co-organizer of the conference "Thue 150" (Bordeaux, October 2013)
- Co-organizer of the "Diophantine Geometry" trimester at the Centro De Giorgi (April-July 2005)

Grants, collaboration projects

- Coordinator of the **ANR project "JINVARIANT"** (2021-2025)
- A French Coordinator of the multi-national **MathAmSud** Project 20-MATH-06 « NT-ACRT - Number Theory: interconnections with Algebra, Combinatorics and Representation Theory » (France, Chile, Colombia) 2020-2022
- The French Coordinator of the joint Indo-French project **SPARC** P445 « Arithmetical aspects of the Fourier coefficients of modular forms », 2020-2021
- The French coordinator of the joint French-Chilean **Ecos Sud** program "Explicit Arithmetic Geometry", 2018-2020.
- The French coordinator of the **International Research Network GandA** France-Denmark-South Africa-Madagascar, (2017-2021)
- Coordinator of the **ANR project "HAMOT"** (2011-2015)
- Local coordinator for the Erasmus Mundus **ALGANT** program (2007-2013)

Editorial duties

- Member of the Scientific Council of the *Journal de Théorie des Nombres de Bordeaux* (since 2005)
- Managing editor of the *International Journal of Number Theory* since 2018 (editor since 2009)
- Editor of the *Research in Number Theory* (since 2018)
- Editor of *Communications In Mathematics* (since 2019)
- Editorial board member of *IMSc Lecture Notes in Mathematics* (since 2017)

Other duties

- Coordinator of the "Problèmes Diophantiens" group at the *Institut de Mathématiques de Bordeaux* (2007-2013 and since 2014)
- Research Master Coordinator at the Mathematics Department of the University of Bordeaux (2007-2014)
- Member of the Council of IMB in 2017-2019

Advisorship

I supervised 10 PhD students who successfully defended their theses. Currently I have 2 more PhD students. I also supervised a number of master theses.

Selected publications

I am author of **one book and more than 60 research articles**. The full list of my publications is available here:
https://www.math.u-bordeaux.fr/~ybilu/bilu_publ.pdf

Here is a selection of my most important publications

1. **Yu. Bilu, Y. Bugeaud, M. Mignotte**, The Problem of Catalan, Springer, 2014.
2. **Yu. Bilu, P. Habegger, L. Kühne**, No Singular Modulus Is a Unit, *Int. Math. Research Notices* **2020**, 10005–10041.
3. **Yu. Bilu, L. Kühne**, Linear Equations in Singular Moduli, *Int. Math. Research Notices* **2020**, 7617–7643.
4. **Yu. Bilu, J.-M. Deshouillers, S. Gun, F. Luca**, Random ordering in modulus of consecutive Hecke eigenvalues of primitive forms, *Compositio Math.* **154** (2018), 2441-2461.
5. **Yu. Bilu, F. Luca**, Diversity in Parametric Families of Number Fields, in: C. Elsholtz, P. Grabner (eds), *Number Theory - Diophantine Problems, Uniform Distribution and Applications: Festschrift in Honour of Robert F. Tichy's 60th Birthday*, 169-191, Springer, 2017.
6. **B. Allombert, Yu. Bilu, A. Pizarro-Madariaga**, CM-Points on Straight Lines, in: C. Pomerance, M. Rassias (eds.), *Analytic Number Theory In Honor of Helmut Maier's 60th Birthday*, 1-18, Springer, 2015.
7. **Yu. Bilu, P. Parent, M. Rebolledo**, Rational points on $X_0^+(p)$, *Ann. Inst. Fourier* **63** (2013), 957-984.
8. **Yu. Bilu, P. Parent**, Serre's Uniformity Problem in the Split Cartan Case, *Ann. Math. (2)* **173** (2011), 569-584.
9. **Yu.F. Bilu**, The Many Faces of the Subspace Theorem (after Adamczewski, Bugeaud, Corvaja, Zannier...), Séminaire Bourbaki, Exposé 967, 59ème année (2006-2007); *Astérisque* **317** (2008), 1-38.
10. **Yu.F. Bilu, F. Luca**, Divisibility of class numbers: enumerative approach, *J. reine angew. Math.* **578** (2005), 79-91.
11. **Yu.F. Bilu**, Catalan's conjecture (after Mihăilescu), Séminaire Bourbaki, Exposé 909, 55ème année (2002-2003); *Astérisque* **294** (2004), 1-26.
12. **Yu. Bilu**, Baker's method and modular curves, *A Panorama of Number Theory or The View from Baker's Garden* (edited by G. Wüstholz), Cambridge University Press 2002; pp. 73-88.
13. **Yu. Bilu, G. Hanrot, P. Voutier** (with an appendix by **M. Mignotte**), Existence of primitive divisors of Lucas and Lehmer numbers, *J. reine angew. Math.* **539** (2001), 75-122.
14. **Yu.F. Bilu, R.F. Tichy**, The Diophantine equation $f(x) = g(y)$, *Acta Arith.* **95** (2000), 261-288.
15. **Yu. Bilu, Y. Bugeaud**, Démonstration du théorème de Baker-Feldman via les formes linéaires en deux logarithmes, *J. Th. Nombres Bordeaux* **12** (2000), 13-23.
16. **Yu. Bilu**, Structure of sets with small sumsets, *Astérisque* **258** (1999), 77-108.
17. **Yu. Bilu**, Limit distribution of small points on algebraic tori, *Duke Math. J.* **89** (1997), 465-476.
18. **Yu. Bilu, G. Hanrot**, Solving Thue equations of high degree, *J. Number Th.* **60** (1996), 373-392.