

CV OF AYHAN GÜNAYDIN

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CURRENT POSITION

Associate Professor
Boğaziçi University

FORMER POSITIONS

Associate Professor, 2015–2017
Mimar Sinan Fine Arts University, Turkey

Assistan Professor, 2012–2015
Mimar Sinan Fine Arts University, Turkey

FCT Postdoc, September 2009–September 2012
Universidade de Lisboa, Portugal

Visiting Scholar, January 2009 – July 2009
Fields Institute, Toronto, Canada.

Marie Curie Postdoc, January 2008 – January 2009
University of Oxford, UK.

EDUCATION

PhD in Mathematics, October 2008
University of Illinois at Urbana-Champaign
Dissertation title: *Model theory of fields with multiplicative subgroups*
Advisor: Lou van den Dries

BSc in Mathematics, 2001
Istanbul Bilgi University, Mathematics, Istanbul, Turkey

TEACHING EXPERIENCE

University of Illinois at Urbana-Champaign

- Calculus I, II; including “Calculus&Mathematica” Sections
- Introduction to Matrix Theory

Mimar Sinan Fine Arts University

- Complex Analysis (Graduate Level)
- Algebra (Graduate Level)
- Introduction to Model Theory
- Computational Galois Theory
- Number Theory I and II
- Real Analysis
- Metric Spaces

- Introduction to Linear Algebra
- Linear Algebra

AWARDS AND GRANTS

- **BAGEP - Young Scientist Award of Science Academy** - Bilim Akademisi - Turkey, 2013 - <http://www.bilimakademisi.org/node/100>
- **Incomplete List of Teachers Rated as Excellent** - University of Illinois at Urbana-Champaign, Fall 2005
- **TÜBİTAK - ARDEB 3501** - Coordinator - *Groups Definable in Pairs of Algebraically Closed Fields* - October 2013 – October 2016
- **TÜBİTAK - BİDEB 2221** - Host - March – August 2016

THESIS SUPERVISION

Completed

- MSc Thesis - Ahmet Burak Akpulat - *Diofant Yaklaşım ve Roth Teoremi*

Ongoing

- PhD Thesis - Melissa Nalbaniyan - *Tame Expansions of the Abelian Group of Integers*
- MSc Thesis - Dicle Mutlu - *Grup Konfigürasyon Teoremi*
- MSc Thesis - Cemil Ulay - *Arşimet Olmayan Katmanlaştırma*

ADMINISTRATIVE

Organizer - Workshop 'A Variety of Model Theory in Lisbon', October 19-20, 2011. For more information: <http://ptmat.fc.ul.pt/~ayhan/workshop/home.html>

PUBLICATIONS

Published:

- Fields of real and complex numbers with a small multiplicative group (with L. van den Dries), *Proceedings of London Mathematical Society*, **93**, (2006), pp. 43–81.
- Thorn independence in the field of real numbers with a small multiplicative group (with A. Berenstein and C. Ealy), *Annals of Pure and Applied Logic*, **150**, (2007), pp. 1–18.
- Mann Pairs (with L. van den Dries), *Trans. Amer. Math. Soc.*, **362**, (2010), 2393-2414.
- Definable sets in Mann pairs (with L. van den Dries), *Communications in Algebra*, **39** (2011), pp. 2752–2763.
- Dependent pairs (with P. Hieronymi), *Journal of Symbolic Logic*, **76**, (2011), pp. 377-390.
- The real field with the rational points of an elliptic curve (with P. Hieronymi), *Fundamenta Mathematicae*, **211**, (2011), pp. 15–40.
- Rational solutions of polynomial-exponential equations, *International Journal of Number Theory*, **8** (2012) 1391–1399

Preprints:

- Structure Theorems in Tame Expansions of o-minimal Structures by Dense Sets (with P. Eleftheriou and P. Hieronymi), submitted, available on arXiv.
- Topological Study of Pairs of Algebraically Closed Fields, submitted, available on arXiv.
- Generic points on exponential curves (with A. Martin-Pizarro).
- The real field with two multiplicative subgroups, available at my homepage.
- The field of real numbers with a small subgroup of the circle group, available at my homepage.

RECENT TALKS AND SEMINARS

2017

- Structures Algébriques Ordonnées, Paris, June 2017 • Géométrie et Théorie des Modèles, Paris, May 2017

2016

- Fields Institute, Invited Speaker at “Workshop on Model Theory: From Fields to Hardy Fields”, August 2016
- Antalya Algebra Days, June 2016 • Koç University, Mathematics Seminar, January 2016
- İstanbul University, Mathematics Seminar, October 2016

2015

- Università di Pisa, Seminario “o-minimalità e dintorni”, January 2015
- Oberseminar at Albert-Ludwigs-Universität Freiburg, Mathematisches Institut, Freiburg, Germany, May 2015
- Coloquio de Matemáticas, Universidad de Los Andes, Bogotá, Colombia, November 2015.
- Seminario de Teoría de Modelos, Universidad Nacional de Colombia, Bogotá, Colombia November 2015

2014

- Boğaziçi University, Mathematics Colloquium, April 2014
- İTÜ, Mathematics Seminar, Ekim 2104

2013

- İstanbul Bilgi Üniversitesi, Mathematics Colloquium.

2012

- Seminar Talk at Mimar Sinan Fine Arts University, Istanbul, February 2012
- Seminar Talk at Sabancı University, Istanbul, February 2012
- Invited Talk at Antalya Algebra Days, Çeşme, May 2012
- Invited Talk at the Model Theory Satellite Meeting of Summerschool “Around the Zilber-Pink conjecture”
- Seminar Talk at Koç University, Istanbul, December 2012

2011

- Algebra Seminar at Instituto Superior Técnico, Lisboa, May 2011
- Oberseminar at Albert-Ludwigs-Universität Freiburg, Mathematisches Institut, Freiburg, Germany, June, 2011
- Invited talk at the Model Theory Special Session at Logic Colloquium 2011, August 2011
- A week-long mini-course on Algebraic Geometry at the Nesin Mathematics Village, Izmir, Turkey