

# CURRICULUM VITAE

Konstantinos Tyros

## Contact information

Department of Mathematics  
Koç University  
Istanbul, 34450, Turkey  
*e-mail*: ktyros@ku.edu.tr  
*URL*: <http://mysite.ku.edu.tr/ktyros/>

## Personal data

*Date of birth*: 23 July 1982  
*Citizenship*: Greek  
*Marital status*: Single  
*Military service*: 12 months (fulfilled)  
*Languages*: Greek, English

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## Education & Employment

- 2016–present** : Assistant Professor, *Koç University*.  
**2014–2016** : Postdoctoral Fellow, *University of Warwick*.  
**2011–2014** : Postdoctoral Fellow, *University of Toronto*.  
**2007–2010** : PhD in Mathematics, *National Technical University of Athens*.  
Title: *Ramsey Theory and Applications in Banach Space Theory*.  
Supervisor: *Vassilis Kanellopoulos*.  
**2006–2007** : MSc in Applied Mathematics, *National Technical University of Athens*.  
**2000–2006** : BSc in Applied Mathematics, *National Technical University of Athens*.

## Research interests

- Combinatorics: Ramsey Theory and Density Ramsey Theory.
- Functional Analysis: Geometry of Banach spaces.

## Publications & Preprints

- (18) **The Bradley–Terry condition is  $L_1$ –testable**  
*with A. Georgakopoulos*  
submitted (10 pages) available at [arXiv:1609.05194](https://arxiv.org/abs/1609.05194).
- (17) **A concentration inequality for product spaces**  
*with P. Dodos and V. Kanellopoulos*  
*Journal of Functional Analysis* 270 (2016), no. 2, 609–620.
- (16) **Primitive recursive bounds for the finite version of Gowers’  $c_0$  theorem**  
*Mathematika* 61 (2015), no. 3, 501–522.
- (15) **A disjoint union theorem for trees**  
*with S. Todorćević*  
*Advances in Mathematics* 285 (2015), 1487–1510.
- (14) **Combinatorial structures on van der Waerden sets**  
*Combinatorics, Probability and Computing* 24 (2015), no. 6, 929–953.

- (13) **On colorings of variable words**  
Discrete Mathematics 338 (2015), no. 6, 1025–1028.
- (12) **A density version of the Carlson–Simpson theorem**  
*with P. Dodos and V. Kanellopoulos*  
Journal of the European Mathematical Society 16 (2014), no. 10, 2097–2164.
- (11) **On the structure of the set of higher order spreading models**  
*with B. Sari*  
Studia Mathematica 223 (2014), no. 2, 149–173.
- (10) **Measurable events indexed by words**  
*with P. Dodos and V. Kanellopoulos*  
Journal of Combinatorial Theory, Series A 127 (2014), 176–223.
- (9) **A simple proof of the density Hales–Jewett theorem**  
*with P. Dodos and V. Kanellopoulos*  
International Mathematics Research Notices (2014), no. 12, 3340–3352.
- (8) **Oscillation stability for continuous monotone surjections**  
*with S. Todorćević*  
Discrete Mathematics 324 (2014), 4–12.
- (7) **Measurable events indexed by products of trees**  
*with P. Dodos and V. Kanellopoulos*  
Combinatorica 34 (2014), no. 4, 427–470.
- (6) **Dense subsets of products of finite trees**  
*with P. Dodos and V. Kanellopoulos*  
International Mathematics Research Notices (2013), no. 4, 924–970.
- (5) **Finite order spreading models**  
*with S. A. Argyros and V. Kanellopoulos*  
Advances in Mathematics 234 (2013), 574–617.
- (4) **Higher order spreading models**  
*with S. A. Argyros and V. Kanellopoulos*  
Fundamenta Mathematicae 221 (2013), no. 1, 23–68.
- (3) **Subsets of products of finite sets of positive upper density**  
*with S. Todorćević*  
Journal of Combinatorial Theory, Series A 120 (2013), no. 1, 183–193.
- (2) **Measurable events indexed by trees**  
*with P. Dodos and V. Kanellopoulos*  
Combinatorics, Probability and Computing 21 (2012), no. 3, 374–411.
- (1) **A discretized approach to W. T. Gowers’ game**  
*with V. Kanellopoulos*  
Bulletin of the Polish Academy of Sciences, Mathematics 58 (2010), 1–16.

### Teaching experience

Instructor for the following courses:

- Calculus I and II (MAT 186, MAT 187 and MAT 136),
- Introduction to Mathematical Logic (MAT 309).

Teaching Assistantship (TA) for the following courses:

- Functional Analysis (graduate course),
- Measure Theory (graduate course),
- Real Analysis,
- Functional Analysis.

### Honors/Awards

- Degree of Excellence from the T.E.E.-T.C.G. (Technical Chamber of Greece).
- Scholarship N.S.F. (National Scholarship Foundation) for the 4th academic year of my undergraduate studies.
- Scholarship N.S.F. (National Scholarship Foundation) for the 3rd academic year of my undergraduate studies.

### Journal referee

- Advances in Mathematics.
- Journal of Symbolic Logic.
- Proceedings of the London Mathematical Society.
- Combinatorica.
- Journal of Combinatorial Theory, Series A.

### Conference co-organization

- 09/2015: *Non-Combinatorial Combinatorics*, University of Warwick.

### Talks/Conference participation

- 10/2016: *Mathematics Seminar*, Galatasaray University (invited talk).
- 02/2016: *Pure Mathematics Seminar*, University of Lancaster (invited talk).
- 11/2015: *Combinatorics Seminar*, University of Cambridge (invited talk).
- 09/2015: *Workshop on Extremal and Probabilistic Combinatorics*, University of Birmingham (participation).
- 09/2015: *LMS-EMS Mathematical Weekend*, University of Birmingham (participation).
- 06/2015: *25th British Combinatorial Conference*, University of Warwick (talk).
- 06/2015: *Regularity and Analytic Methods in Combinatorics*, University of Warwick (participation).
- 03/2015: *Forcing and its Applications, Retrospective Workshop*, Fields Institute, Canada (talk).

- 09/2014: *Tutte Seminar*, University of Waterloo (invited talk).
- 09/2014: *Toronto Set Theory Seminar*, University of Toronto (invited talk).
- 06/2014: *Graph limits, groups and stochastic processes*, MTA Renyi Institute, Hungary (participation).
- 05/2014: *7th Young Set Theory Workshop*, Banach Center Conferences, Poland (invited talk).
- 03/2014: *Toronto Set Theory Seminar*, University of Toronto (2 invited talks).
- 01/2014: *Joint Mathematics Meetings*, Baltimore, USA (participation).
- 12/2013: *Toronto Set Theory Seminar*, University of Toronto (invited talk).
- 11/2013: *Axiomatic approaches to forcing techniques in set theory*, BIRS, Canada (participation).
- 10/2013: *Millican Colloquium*, University of North Texas (invited talk).
- 06/2013: *Analysis Seminar*, University of Crete (invited talk).
- 06/2013: *Ergodic Theory with Connections to Arithmetic*, Heraklion, Greece (participation).
- 04/2013: *Toronto Set Theory Seminar*, University of Toronto (invited talk).
- 03/2013: *Extremal Combinatorics at Illinois*, Urbana–Champaign, USA (participation).
- 10/2012: *Arbeitsgemeinschaft: Ergodic Theory and Combinatorial Number Theory*, Oberwolfach, Germany (talk).
- 08/2012: *Geometry of Banach spaces*, CIRM, France (participation).
- 07/2012: *Additive Combinatorics in Paris 2012*, IHP, France (participation).
- 03/2012: *Banach Space Theory*, BIRS, Canada (invited talk).
- 11/2011: *Toronto Set Theory Seminar*, University of Toronto (2 invited talks).
- 02/2011: *Set-theoretic Techniques in Functional Analysis*, Castro Urdiales, Spain (talk).
- 06/2010: *International Functional Analysis Meeting*, Valencia, Spain (participation).
- 05/2010: *13th Panhellenic Conference in Mathematical Analysis*, Ioannina, Greece (talk).
- 12/2008: *Descriptive Set Theory in Paris*, Paris, France (participation).