

# Curriculum Vitae

## LALE ÖZKAHYA

Hacettepe Üniversitesi  
Bilgisayar Mühendisliği Bölümü  
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### Research interests

Combinatorics, graph theory and its applications.

### Education

University of Illinois, Urbana-Champaign, Illinois, USA

Ph.D. in Mathematics, 2010.

Thesis title: *Problems in Extremal Graph Theory*

Advisor: Zoltán Füredi

University of Illinois, Urbana-Champaign, Illinois, USA

M.S. in Aerospace engineering

Computational Science and Engineering Program, 2003.

Boğaziçi (Bosphorus) University, Istanbul, Turkey

B.S. in Mechanical engineering, 1999.

### Professional Experience

- May 2014 - present: Associate Professor,  
Dept. of Computer Engineering, Hacettepe University.
- July 2012 - May 2014: Expert,  
Dept. of Mathematics, Hacettepe University.
- January 2012 - May 2012: Postdoctoral researcher,  
Dept. of Mathematics, Işık University,  
Supervisor: Türker Bıyıkoglu.
- September 2011 - January 2012: Part-time lecturer,  
Dept. of Mathematics, İstanbul Bilgi University.
- June - August 2011: Visiting researcher,  
Alfred Rényi Institute, Hungary.
- August 2010 - May 2011: Postdoctoral research associate,  
Dept. of Mathematics, Iowa State University,  
Supervisor: Maria Axenovich.

- August 2008 - August 2010: Research assistant,  
Dept. of Mathematics, University of Illinois at Urbana-Champaign,  
Supervisor: Zoltán Füredi.
- August 2004 – August 2010: Teaching assistant,  
Dept. of Mathematics, University of Illinois at Urbana-Champaign.
- January 2001 – August 2003: Research assistant,  
Dept. of Aerospace engineering, University of Illinois at Urbana-Champaign.

### Accepted Papers

1. L. Özkahya, Y. Person: “Minimum Rainbow  $H$ -decompositions of graphs”, *European Journal of Combinatorics* **71** (2018), 111–124.
2. Z. Füredi, L. Özkahya: “On 3-uniform hypergraphs without a cycle of a given length”, *Discrete Applied Mathematics* **216** (3) (2017), 582–588.
3. L. Özkahya, B. Stanton: “On a covering problem in the hypercube”, *Graphs and Combinatorics* **31**(1) (2015), 235–242.
4. L. Özkahya, M. Young: “Anti-Ramsey number of matchings in hypergraphs”, *Discrete Mathematics* **313**(20) (2013), 2359–2364 .
5. M. Axenovich, L. Özkahya: “On homometric sets in graphs”, *Australas. J. Combin.* **55** (2013), 175–187.
6. Z. L. Nagy, L. Özkahya, B. Patkós, M. Vizer: “On the ratio of maximum and minimum degree in maximal intersecting families”, *Discrete Mathematics* **313** (2013), 207–211.
7. L. Özkahya, Y. Person: “Minimum  $H$ -decompositions of graphs: edge-critical case”, *Journal of Combinatorial Theory, Series B*, **102** (2012), 715–725.
8. Z. Füredi, L. Özkahya: “Unavoidable subhypergraphs:  $a$ -clusters”, *Journal of Combinatorial Theory, Series A* **118** (2011), 2246–2256.
9. Z. Füredi, L. Özkahya: “On even-cycle-free subgraphs of the hypercube”, *Journal of Combinatorial Theory, Series A* **118** (2011), 1816–1819.
10. J. Choi, L. Özkahya, D. West: “Degree-splittability of caterpillars and regular multigraphs”, *Congressus Numerantium* **202** (2010), 137–148.
11. A. Kostochka, L. Özkahya and D. Woodall: “A Brooks-type bound for squares of  $K_4$ -minor-free graphs”, *Discrete Mathematics* **309** (2009), 6572–6584.
12. Z. Füredi, L. Özkahya: “On 14-cycle-free subgraphs of the hypercube”, *Combinatorics, Probability and Computing* **18** (2009), 725–729.

### Professional Service

- Referee for  
*Australasian J. of Combin.*, *Cent. Eur. J. of Math.*, *Combin. Probab. Comput.*, *Discrete Applied Math.*, *Discrete Math.*, *Discuss. Math. Graph Theory*, *Graphs and Combin.*, *J. Graph Theory*, *J. of Combin. Optim.*, *Turkish J. of Elec. Eng. Comp. Sci.*, *Turkish J. of Math.* (and editor, 2015–2017), *IEEE Transactions on Industrial Informatics*, *J. Combin. Theo. Ser. A.*, *Electronic J. of Combin.*

- Co-organizer of *Special Session on Graph Theory*, AMS Central Section Meeting, Iowa City, IA, 2011.

### Academic Honors and Awards

- Science Academy Young Scientist Award (2018).
- Invited researcher at Institute of Mathematics Goethe University, Frankfurt, Germany, 2018.
- Invited researcher at Gwangju Institute of Science and Technology, Gwangju, South Korea, July 2015.
- Invited researcher at Alfred Renyi Institute of Mathematics, Budapest, Hungary, January 2015.
- Invited participant of the IMA workshop “Geometric and Enumerative Combinatorics”, Institute for Mathematics and its Applications (IMA) in University of Minnesota, Minneapolis, U.S.A., November 2014.
- Invited participant of the AIM workshop “Hypergraph Turán Problem”, American Institute of Mathematics, Palo Alto, U.S.A., March 2011.
- Long-term sponsored fellow at Institute of Pure and Applied Mathematics (IPAM) in UCLA for the Fall 2009 program: *Combinatorics: Methods and Applications in Mathematics and Computer Science*, Los Angeles, U.S.A., September-December 2009.

### Projects

- TUBITAK-1001, 'TARIF : Kendin yap videolarının eşleştirilmesi ve zenginleştirilmesi için çok-kipli yaklaşım', 2019-, researcher.
- TUBITAK and European Science Foundation (EUROCORES Programme EUROGIGA), 'Geometric representations and symmetries of graphs, maps and other discrete structures and applications in science' (GREGAS), 2011-2015, researcher.

### Invited Talks

- IMBM Discrete Math Days, Boğaziçi (Bosphorus) University, Istanbul, Turkey, 2019.
- Workshop on Graph Theory and its Applications III, Boğaziçi (Bosphorus) University, Istanbul, Turkey, 2012.
- 25th National Mathematics Symposium, Nigde, Turkey, 2012.
- AMS Fall Central Section Meeting, *Special Session on Graphs and Hypergraphs*, University of Notre Dame, Notre Dame, Indiana, 2010.
- Conference in honor of Laci Babai's 60th birthday, *Combinatorics, Groups, Algorithms, and Complexity*, Ohio State University, Columbus, Ohio, 2010.
- IPAM Fall Program - Culminating workshop at Lake Arrowhead, *Combinatorics: Methods and Applications in Mathematics and Computer Science*, Los Angeles, California, 2009.