

# Ahmet Çevik

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## Education

- 2014 | Ph.D in Mathematics, University of Leeds, United Kingdom.  
Thesis: *Degrees of members of  $\Pi_1^0$  classes.*  
Advisor: S. Barry Cooper, Andrew E. M. Lewis.
- 2009 | M.Sc. in Computer Engineering, Atılım University, Ankara, Turkey.  
Thesis: *State Change Languages: Algebraic and Language Class Properties.*  
Advisor: Hürevren Kılıç.
- 2007 | B.Sc. in Computer Engineering, Atılım University, Ankara, Turkey.  
Thesis: *Collective Behavior Intelligence and Optimization.*  
Advisor: Nergiz Ercil Çağiltay.

## Academic Experience

Lecturer	September 2016 - Present
<b>Middle East Technical University, Department of Philosophy, Turkey</b>	
Postdoctoral visit	2015 - 2016
<b>UC Berkeley, Department of Mathematics, USA</b>	
Lecturer	Feb 2015 - July 2015
<b>Middle East Technical University, Department of Philosophy, Turkey</b>	
Research and Teaching Assistant	2007 - 2010
<b>Atılım University, Department of Computer Engineering, Turkey</b>	

## Teaching Experience

### Middle East Technical University

#### Lecturer

Teaching duties included preparing the syllabus and lecture notes; lecturing, assigning and grading homework; writing and grading exams; and holding weekly office hours.

- *Courses:* Philosophy of Logic and Mathematics  
Axiomatic Set Theory

### Atılım University

#### Teaching and Research Assistant

Teaching duties included holding weekly tutorials, writing and grading worksheets; holding office hours.

- *Courses:* Artificial Intelligence  
Formal Language Theory  
Algorithms  
Computer Programming  
Digital Logic  
Computer Architecture

## Refereed Journal Publications

- (i) A. Çevik  
*Minimal bounds and members of effectively closed sets*, submitted.
- (ii) A. Çevik  
*An effectively closed set with no join property*, submitted.
- (iii) A. Çevik  
*Transfinite Computation and Non-Recursive Functions*, submitted.
- 1 A. Çevik  
 $\Pi_1^0$  choice classes, DOI 10.1002/malq201500055, Mathematical Logic Quarterly, Vol. 62, No 6, pp. 563-574 (2016).
- 2 A. Çevik  
*Antibasis theorems for  $\Pi_1^0$  classes and the jump hierarchy*, DOI 10.1007/s00153-012-0310-y, Archive for Mathematical Logic, Vol. 52, Issue 1-2, pp. 137-142, Springer, (2013).
- 3 A. Çevik  
*On the possibility of supertasks*, Beytulhikme - An International Journal of Philosophy, Vol.5, pp.171-180 (2013).
- 4 A. Çevik  
*Philosophy of Hilbert's Formalization Program*, Felsefe Dünyası, Vol. 60, pp. 265-280 (2014).
- 5 H. Koyuncu and A. Çevik  
*Indoor Localization by using Particle Filtering Approach with Wireless Sensor Nodes*, JCOMSS - Journal of Communications Software and Systems, Vol.9, No.1, pp. 74-83 (2013).

## Refereed Journal Publications (Turkish)

- (i) A. Çevik  
*Seçim Aksiyomu'nun doğallığının veya yapaylığının belirlenmesi üzerine*, submitted.
- 1 A. Çevik and Z. Ercan  
*Nedir Bu 'Modern' Matematik?*, Bilim ve Gelecek, No 154, pp. 71-81 (2016).
- 2 A. Çevik  
*Matematik Felsefesi: Mantıkçılık*, Matematik Dünyası, No 104, pp. 50-53 (2016).
- 3 A. Çevik  
*Matematik Felsefesi: Sezgicilik*, Matematik Dünyası, No 103, pp. 53-58 (2016).
- 4 A. Çevik  
*Matematik Felsefesi: Platonculuk*, Matematik Dünyası, No 102, pp. 51-55 (2015).
- 5 A. Çevik  
*19. ve 20. yüzyıl bilinebilirliğinin matematiğe yansımaları*, Bilim ve Ütopya, No 253, pp. 62-65 (2015).
- 6 A. Çevik  
*Kardinaller, Modeller ve Skolem Paradoksu*, Matematik Dünyası, No 101, pp. 81-84. (2014).
- 7 A. Çevik  
*Sonluötesi hesaplama*, Matematik Dünyası, No 95, pp. 69-72 (2013).
- 8 A. Çevik  
*Hesaplanabilirlik Kuramı ve Turing Derecelerine Giriş*, Gaziosmanpaşa Üniversitesi Bilimsel Araştırma Dergisi, Vol. 1, pp. 1-20 (2012).
- 9 A. Çevik  
*Sayılamaz sonsuzluk, karar verilemezlik, Gödel'in Eksiklik Teoremi*, Felsefe Dünyası, Vol. 53, pp. 253-270 (2011).

## Conference Publications

- 1 A. Çevik and H. Kılıç  
*An Infinite Proper Subset of Regular Languages as a State Change Based Coupling of Finite Automata*, International Conference on Computer Science and Applications 2015 (ICCSA 2015), San Francisco, USA, October 2015, Conference proceedings, Vol I, pp. 55-58 (2015).
- 2 A. Çevik  
*Is the Church-Turing thesis the new Pythagoreanism?*, 5th World Congress and School on Universal Logic, University of Istanbul, June 25-30 2015, Turkey, Conference proceedings, pp. 85-86 (2015).
- 3 A. Çevik  
*A Linear-time algorithm for the prediction of compression during multimedia transmissions*, International Conference on Theoretical and Mathematical Foundations of Computer Science (TMFCS 2009), Orlando, FL, USA, July 2009, Proc. of TMFCS-09, pp. 49-53 (2009)
- 4 A. Çevik  
*Cryptology in quantum computing*, International Conference on Theoretical and Mathematical Foundations of Computer Science (TMFCS 2009), Orlando, FL, USA, July 2009, Proc. of TMFCS-09, pp. 54-58 (2009)
- 5 İ. K. Öcal, A. Çevik, İ. Cereci and H. Kılıç  
*F-Actor: A multiagent gaming environment for controlling virtual flow networks*, The 13th International Games Conference, (CGAMES 2008), Wolverhampton, UK, Nov. 2008, Proc. of 13th International Games Conference, pp. 86-91 (2008).

## Books (Turkish)

- 1 A. Çevik  
*Matematik Felsefesi ve Matematiksel Mantık (Philosophy of Mathematics and Mathematical Logic)*, (submitted for publication)

## Conference Publications (Turkish)

- 1 A. Çevik  
*Church-Turing Tezi'ndeki ifadesel tamlık ve hipotezin alternatifleri*, V. Mantık Çalıştayı, Bildiriler Kitabı, s. 241-244, Uludağ Üniversitesi, Bursa, 15-17 May 2015.
- 2 A. Çevik  
*Hesaplanabilirlik kuramı nedir?*, XXVI. Ulusal Matematik Sempozyumu 2013, Diyarbakır, Bildiri özetleri kitabı, pp. 50 (2013).
- 3 İ. K. Öcal, A. Çevik, İ. Cereci, H. Kılıç  
*Sanal Akış Ağı Ortamında Kontrol Amaçlı Çok Kullanıcılı Bir Prototip Oyun Yazılımı*, Otomatik Kontrol Ulusal Toplantısı - (TOK 2008), İstanbul, Nov. 2008, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, pp. 692-698 (2008).
- 4 M. U. Öney, A. Çevik, N. E. Çağiltay, Ö. Kılıç  
*Topluluk Zekası Yönetimi ve Optimizasyonu*, Akademik Bilişim 2007, Dumlupınar University, Kütahya, Turkey, Jan. 2007, IX.Akademik Bilişim Konferansı Bildiriler Kitabı, pp.333-340 (2007).

## Scholarships and Awards

- 2015 Merit award for the 2015 International Conference of Computer Science and Applications (ICCSA 2015), Berkeley, USA. Paper title: *An Infinite Proper Subset of Regular Languages as a State Change Based Coupling of Finite Automata*.
- 2015 Postdoctoral research scholarship, The Scientific and Technological Council of Turkey (TUBITAK).

## Conference Talks

- October 2016 | *Mini-Workshop in Logic and its Applications*, Boğaziçi University, Istanbul, Turkey.
- Feb 2016 | *ASL Southeastern Logic Symposium 2016*, University of Florida, Gainesville, FL, USA. Degree spectrum properties of  $\Pi_1^0$  choice classes.
- Jun 2015 | *5th World Congress and School on Universal Logic, University of Istanbul, Turkey. Is the Church-Turing Thesis the new Pythagoreanism?*  
(Invited keynote speaker)
- Sep 2015 | *British Logic Colloquium*, Cambridge University, UK. A variant of  $\Pi_1^0$  class.
- July 2015 | *Computability in Europe 2015*, Bucharest, Romania, June 29-July 3 2015, (informal presentation)

## Invited Seminar Talks

- 2009 | Atılım University, Dept. of computer engineering: Crisis in the foundation of mathematics.
- Oct 2009 | Atılım University, Dept. of computer engineering: An infinite proper subset of regular languages and abstract power consumption.
- Dec 2009 | Atılım University, Dept. of mathematics: Undecidable statements on a functional property of universal models of computation.
- Feb 2011 | University of Leeds, School of Mathematics: Consistency strength and higher axioms of ZFC.
- Mar 2011 | University of Leeds, School of Mathematics: Degrees of the members of  $\Pi_1^0$  classes.
- Mar 2011 | Ankara University, Department of Mathematics: Introduction to recursion theory and  $\Pi_1^0$  classes.
- Oct 2011 | University of Leeds, School of Mathematics: Formal languages.
- Dec 2011 | Atılım University, Department of Mathematics: Degrees of Undecidability.
- Dec 2011 | Ankara University, Department of Mathematics: Tutarlılık gücü ve ZFC'nin yüksek belitleri.
- Dec 2011 | Middle East Technical University, Department of Mathematics: Degrees of Unsolvability.
- Mar 2012 | University of Leeds, School of Mathematics: Infinite time Turing machines.
- May 2012 | University of Leeds, School of Mathematics: Computational length of infinite time Turing machines.
- Nov 2012 | University of Leeds, School of Mathematics: Antibasis theorems for  $\Pi_1^0$  classes.
- Apr 2013 | Atılım University, Department of Computer Engineering: A concise introduction to recursion theory.
- Apr 2013 | Ankara University, Department of Mathematics: Antibasis theorems for  $\Pi_1^0$  classes.
- Jan 2014 | University of Leeds, School of Mathematics: Degree theoretic properties in effectively closed sets.
- Oct 2014 | Ankara University, Department of Mathematics: Current trends in theory of unsolvability.
- Oct 2014 | Middle East Technical University, Department of Mathematics: Study of unsolvability.
- Nov 2014 | Atılım University, Department of Mathematics: Philosophical analysis of the formalization of mathematics.
- Nov 2014 | Middle East Technical University, Department of Philosophy: On the formalization of mathematics.
- Mar 2015 | Hacettepe University, Department of Mathematics: Algorithmic Unsolvability.
- Feb 2016 | University of California at Berkeley, Department of Mathematics: Degree theoretic properties of  $\Pi_1^0$  classes.
- Mar 2017 | Gazi University, Department of Mathematics: What is the Axiom of Choice?
- Mar 2017 | Boğaziçi University, Department of Philosophy: On the naturality, or otherwise, of the Axiom of Choice.
- Mar 2017 | Mimar Sinan Fine Arts University, Department of Mathematics: Effectively closed sets in recursion theory.
- Apr 2017 | Abant İzzet Baysal University, Department of Mathematics: Understanding the Axiom of Choice.

## Presented Lecture Series

- 8-14 Sep 2014 | *A short introduction to recursion theory and  $\Pi_1^0$  classes*, Nesin Mathematics Village, Turkey.