
Assistant Professor, Division of Elementary
Mathematics Education – Hacettepe University
Ankara – Turkey

esaygi@hacettepe.edu.tr

Cell: +90 505 7155429

EDUCATION:

- Ph.D. in Cryptography, Middle East Technical University, Ankara, Turkey, 2009
- M.S. in Cryptography, Middle East Technical University, Ankara, Turkey, 2004
- B.S. in Mathematics, Middle East Technical University, Ankara, Turkey, 2002

RESEARCH INTEREST:

- Cryptography: Block Ciphers, Stream ciphers, Authenticated Encryption
- Finite Fields and Their Applications, Algebraic Curves over Finite Fields
- Mathematics Education

EMPLOYMENTS:

- Hacettepe University, Division of Elementary Mathematics Education, Assistant Professor, since 2012
- Hacettepe University, Division of Elementary Mathematics Education, Lecturer, 2009-2012
- Hacettepe University, Division of Elementary Mathematics Education, Research Assistant, 2005-2009

PROJECTS:

- Research, Improvements and Applications on PKI, sponsored by TUBITAK, 01.July.2006 - 01.July.2008 Researcher

COURSES:

- Basic Mathematics
- Calculus-I
- Calculus-II
- Calculus-III
- Linear Algebra
- Discrete Mathematics
- Algebra
- Number Theory
- Analytic Geometry
- Geometry
- Mental Games

PUBLICATIONS:

A. Journals

1. F. Özbudak, E. Saygı, Z. Saygı, Quadratic Forms of Codimension 2 over Finite Fields Containing F_4 and Artin-Schreier Type Curves, Finite Fields and Their Applications, vol. 18, No. 2, pp. 396-433 (2012).
2. F. Özbudak, E. Saygı, Z. Saygı, A New Class of Quaternary LCZ Sequence Sets, Designs, Codes and Cryptography, vol. 62, No. 2, pp. 189-198 (2012).
3. F. Özbudak, E. Saygı, Z. Saygı, Quadratic forms of codimension 2 over certain finite fields of even characteristic, Cryptography and Communications, vol. 3, No. 4, pp. 241-257 (2011).
4. O. A. İspir, Z. S. Polat Ay, E. Saygı, Üstün Başarılı Öğrencilerin Öz Düzenleyici Öğrenme Stratejileri, Matematiğe Karşı Motivasyonları ve Düşünme Stilleri, Eğitim ve Bilim, Vol 36, No 162, pp. 235-246 (2011)

B. International Conference Papers:

1. F.Özbudak, E. Saygı, Z. Saygı, "Quadratic Forms Of Codimension 2 Over Certain Finite Fields Of Even Characteristics" YACC 10 Book Of Abstracts Yet Another Conference On Cryptography, pp.9-13, October, 2010
2. F.Özbudak, E. Saygı, Z. Saygı, Quadratic Forms Of Codimension 2 Over Certain Finite Fields Containing F_4 And Artin-Schreier Type Curves, XII Antalya Algebra Days Book Of Abstracts pp 11, May 2009
3. A. Doğanaksoy, E. Saygı, Z. Saygı, Some Necessary Conditions for a Quadratic Feedback Shift Register to Generate a Maximum Length Sequence, BFCA-07, Proceedings of Third International Workshop on Boolean Functions : Cryptography and Applications, May 2-3, 2007, Paris, France.
4. E. Saygı, Z. Saygı, M. S. Turan, A. Doğanaksoy, Statistical approach on the number of SAC satisfying functions, BFCA-05, Proceedings of First International Workshop on Boolean Functions: Cryptography and Applications, pp. 39-48, March 7-9, 2005, Rouen, France.

C. National Conference Papers:

1. E.Saygı, A.Umay, Kriptoloji Yardımıyla Fonksiyon Kavramının Oluşturulması, 9. Matematik Sempozyumu Özetler Kitabı, pp. 137-138, Ekim 20-22 2010, Trabzon, Türkiye
2. Z.S. Polat, O.Akkuş İspir, E. Saygı, Öğretmen Adaylarının Geometri Dersi Kapsamında İspat Performanslarının ve Geometride İspata Yönelik Tutumlarının İncelenmesi, 19. Ulusal Eğitim Bilimleri Kurultayı Bildiriler Kitabı, pp. 225, Eylül 2010, Lefkoşe, Kıbrıs
3. E.Saygı, Z.S. Polat, O.Akkuş İspir, İlköğretim Matematik Öğretmen Adaylarının Soyut Matematik Dersinde İspat Yaparken Karşılaştıkları Zorluklar, 19. Ulusal Eğitim Bilimleri Kurultayı Bildiriler Kitabı, pp. 223, Eylül 2010, Lefkoşe, Kıbrıs

4. A. Dođanaksoy, E. Sayđı, Quadratic Feedback Shift Registers Generating Maximum Length Sequences, II. Ulusal Kriptoloji Sempozyumu, Ankara, Trkiye, Sayfa 141-145, 15-17 Aralık 2006
5. A.Dođanaksoy, E. Sayđı, On the Quadratic Feedback Shift Registers, 1. Ulusal Kriptoloji Sempozyumu, pp. 127-133, 2005

D. Other:

1. Results on LCZ Sequences and Quadratic Forms, Ph.D. Thesis, 2009, METU.
2. Counting and Constructing Boolean Functions with Particular Difference Distribution Vectors, M.S. Thesis, 2004, METU.