

Assoc. Prof. EMİN AYGÜN

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Matematik, Turkey 2001 - 2006

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1999 - 2001

Undergraduate, Erciyes University, Fen Edebiyat Fakültesi, Matematik, Turkey 1994 - 1998

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Yakın-Halkalarda N -grupsallar ve v -asal idealler üzerine, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, 2006

Postgraduate, SİMETRİK GRUPLARIN MODÜLER REPREZANTASYONU, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, 2001

Research Areas

Cryptography, Mathematics, Commutative Rings and Algebras, General Mathematics, Group Theory and Generalizations, Natural Sciences

Academic Titles / Tasks

Associate Professor, Erciyes University, Fen Fakültesi, Matematik, 2020 - Continues

Assistant Professor, Erciyes University, Fen Fakültesi, Matematik, 2018 - 2020

Assistant Professor, Erciyes University, Fen Fakültesi, Matematik, 2007 - 2018

Research Assistant, Erciyes University, Fen Fakültesi, Matematik, 1998 - 2006

Academic and Administrative Experience

Erciyes University, 2016 - Continues
Erciyes University, 2009 - Continues
Deputy Head of Department, Erciyes University, Fen Fakültesi, Matematik Bölümü, 2015 - 2021
Mevlana Exchange Program Coordinator, Erciyes University, Fen Fakültesi, Matematik Bölümü, 2014 - 2020
Erciyes University, 2014 - 2020
Erciyes University, 2012 - 2020
Erciyes University, 2011 - 2020
Fakülte Akademik Kurul Üyesi, Erciyes University, Fen Fakültesi, Matematik Bölümü, 2010 - 2020
Farabi Coordinator, Erciyes University, Fen Fakültesi, Matematik Bölümü, 2009 - 2020
Erciyes University, 2009 - 2020
Deputy Head of Department, Erciyes University, Fen Fakültesi, Matematik Bölümü, 2008 - 2014

Courses

KRİPTOGRAFİ, Doctorate, 2011 - 2012
SOYUT CEBİR, Undergraduate, 2011 - 2012
YAKIN-HALKALAR, Postgraduate, 2008 - 2009
SAYILAR TEORİSİ, Undergraduate, 2008 - 2009
LİNEER CEBİR, Undergraduate, 2007 - 2008
GENEL MATEMATİK, Undergraduate, 2007 - 2008

Advising Theses

AYGÜN E., ESNEK KÜMELER YARDIMIYLA ELDE EDİLEN YENİ BİR KRİPTOSİSTEM, Postgraduate, S.Erdinç(Student), 2018
AYGÜN E., ROUGH KÜMELER VE BELİRSİZLİK İÇEREN PROBLEMLERİN KARAR VERME METODLARIYLA ÇÖZÜMÜ, Postgraduate, H.KAHRAMAN(Student), 2017
AYGÜN E., GENEL LİNEER GRUPLAR KULLANILARAK YAPILAN KRİPTOSİSTEM, Postgraduate, M.KORKMAZ(Student), 2017
AYGÜN E., HOMOMORFİK KRİPTOSİSTEMLER VE ÖZELLİKLERİ ÜZERİNE, Doctorate, E.LÜY(Student), 2016
AYGÜN E., ESNEK RADİKALLER, Postgraduate, B.ERDAL(Student), 2016
AYGÜN E., ESNEK DİREKT TOPLANAN, Postgraduate, T.CANAYAZ(Student), 2015
AYGÜN E., SOFT KRİPTOLOJİ, Postgraduate, B.KILIÇ(Student), 2015
AYGÜN E., ESNEK MATRİS VE KARAR VERME METODLARI ÜZERİNE, Postgraduate, A.DEVRAN(Student), 2012
AYGÜN E., ABELYAN OLMAYAN SONLU GRUPLAR KULLANILARAK ELDE EDİLEN AÇIK ANAHTAR KRİPTOSİSTEM ÜZERİNE, Postgraduate, E.LÜY(Student), 2012
AYGÜN E., ESNEK CİSİM VE ESNEK YAKIN-CİSİM, Postgraduate, H.ALABİD(Student), 2011
AYGÜN E., ESNEK YAKIN-HALKALARIN KARAKTERİZASYONU VE İNŞASI ÜZERİNE, Postgraduate, A.SEZGİN(Student), 2010
AYGÜN E., REGÜLER VE KUVVETLİ REGÜLER YAKIN-HALKALARIN İNCELENMESİ, Postgraduate, S.ŞENER(Student), 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Some new algebraic structures of soft sets**
Aygün E., Kamacı H.
SOFT COMPUTING, vol.25, no.13, pp.8609-8626, 2021 (SCI-Expanded)
- II. **An investigation of soft radicals**
AYGÜN E., Erdal B.

- JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.39, no.1, pp.1341-1346, 2020 (SCI-Expanded)
- III. **Some generalized operations in soft set theory and their role in similarity and decision making**
AYGÜN E., KAMACI H.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.36, no.6, pp.6537-6547, 2019 (SCI-Expanded)
- IV. **Soft Matrix Product and Soft Cryptosystem**
AYGÜN E.
FILOMAT, vol.32, no.19, pp.6519-6530, 2018 (SCI-Expanded)
- V. **Groups of soft sets**
Atagun A. O., AYGÜN E.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.30, no.2, pp.729-733, 2016 (SCI-Expanded)
- VI. **A NOTE ON SOFT NEAR-RINGS AND IDEALISTIC SOFT NEAR-RINGS**
Sezgin A., Atagun A. O., AYGÜN E.
FILOMAT, vol.25, no.1, pp.53-68, 2011 (SCI-Expanded)
- VII. **Prime and Special Radicals in Near-Rings**
ALTINDIŞ H., AYGÜN E., ATAGÜN A. O.
Algebras Groups and Geometries, pp.209-218, 2006 (SCI-Expanded)
- VIII. **S-special Near-rings**
AYGÜN E.
Institute of Mathematics & Computer Sciences, no.19, pp.205-210, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Score-Valued Decision Making Models Based on Inverse Soft Matrices**
Erdoğan S., AYGÜN E.
Sahand Communications in Mathematical Analysis, vol.21, no.3, pp.111-126, 2024 (ESCI)
- II. **Two Different Types of Soft Near-Fields**
Aygün E., Kamacı H.
PUNJAB UNIVERSITY JOURNAL OF MATHEMATICS, vol.54, no.7, pp.429-440, 2022 (ESCI)
- III. **Ters Esnek Matrislerde Çoklu Karar Verme Metodu**
Aygün E., Ateş R., Erdoğan S.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.37, no.2, pp.249-259, 2021 (Peer-Reviewed Journal)
- IV. **Radicals of soft intersectional ideals in semigroups**
Aygün E., Erdal B.
Cumhuriyet Science Journal, vol.42, no.42, pp.115-122, 2021 (Peer-Reviewed Journal)
- V. **AES Şifreleme ve Esnek Kümeler Yardımıyla Elde Edilen Yeni Bir Kriptosistem**
AYGÜN E., Akbulut S.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Fen Bilimleri Dergisi, vol.35, no.1, pp.33-40, 2019 (Peer-Reviewed Journal)
- VI. **AES Encryption and A Cryptosystem Obtained with Soft Set II**
AYGÜN E.
Cumhuriyet Science Journal, vol.40, pp.69-78, 2019 (Peer-Reviewed Journal)
- VII. **Difference Operations of Soft Matrices with Applications in Decision Making**
Kamacı H., Atagün A. O., AYGÜN E.
PUNJAB UNIVERSITY JOURNAL OF MATHEMATICS, vol.51, no.3, pp.1-21, 2019 (ESCI)
- VIII. **Novel Cryptosystems Based on Two Different Mod Values**
Karataş Z. Y., AYGÜN E., LÜY E., Ergin ., Gonen B.
Alabama Journal of Mathematics, pp.1-5, 2017 (Peer-Reviewed Journal)
- IX. **A SYMMETRIC KEY FULLY HOMOMORPHIC ENCRYPTION 2 SCHEME USING GENERAL CHINESE REMAINDER THEOREM**
AYGÜN E., LÜY E.

Konuralp Journal of Mathematics, vol.4, pp.122-129, 2016 (Peer-Reviewed Journal)

- X. **ESNEK DİREKT TOPLANAN**
AYGÜN E., ATAGÜN A. O., Canayaz T.
Erciyes Üniversitesi Fen Bilimleri Enstitü Dergisi, vol.31, no.4, pp.200-205, 2015 (Peer-Reviewed Journal)
- XI. **An Elementary Generalization on Modified Rivest Encryption**
AYGÜN E., LÜY E., Karataş Z. Y.
Alabama Journal of Mathematics, pp.41, 2015 (Peer-Reviewed Journal)
- XII. **YAKIN HALKALARIN FARKLI ASAL İDEALLERİ VE DİREKT TOPLANANLAR**
AYGÜN E., ATAGÜN A. O.
ERCIYES ÜNİVERSİTESİ FEN BİLİMLERİ DERGİSİ, vol.21, pp.54-61, 2006 (Peer-Reviewed Journal)
- XIII. **YAKIN HALKALAR İÇİN BİR KUVVETLİ KALITSAL RADİKALLER**
AYGÜN E., ATAGÜN A. O.
ERCIYES ÜNİVERSİTESİ FEN BİLİMLERİ DERGİSİ, vol.22, pp.179-183, 2006 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Esnek Kümeler ve Vernam Şifreleme Üzerine**
AYGÜN E., YILMAZ İ.
3. BASKENT INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY STUDIES, Ankara, Turkey, 23 - 25 September 2022, pp.1108-1115
- II. **An investigation of Soft Cryptosystem**
AYGÜN E.
II. International Scientific and Vocational Studies Congress – Science and Mathematics, 5 - 08 July 2018
- III. **Characterization of N-Groups in Soft Sets**
AYGÜN E.
II. International Scientific and Vocational Studies Congress – Science and Mathematics, 5 - 08 July 2018
- IV. **Soft Encryption and AES**
AYGÜN E., Öner A.
International Conference on Mathematics and Mathematics Educations (ICMME-2018), 27 - 29 June 2018
- V. **A note on new ring structure**
AYGÜN E.
International Conference on Mathematics and Mathematics Educations (ICMME-2018), 27 - 29 June 2018
- VI. **An Investigation of soft cryptosystem**
AYGÜN E.
International Conference on Mathematics and Mathematics Educations (ICMME-2018), 27 - 29 June 2018
- VII. **An Investigation of soft cryptosystem**
AYGÜN E.
International Conference on Mathematics and Mathematics Educations (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.16
- VIII. **A NEW CYRPTOSYSTEM USING SOFT MATRICES**
AYGÜN E.
International Conference on Advanced Technologies (ICAT'18), 28 April - 01 May 2018
- IX. **A NEW ENCRYPTION SCHEME USING SOFT SETS**
AYGÜN E.
7th International Conference on Advanced Technologies ICAT'18, 28 April - 01 May 2018
- X. **A New Radical Structures on the Soft Sets**
Erdal B., AYGÜN E.
International Conference on Mathematics and Mathematics Education (ICMME-2017), Harran University, Şanlıurfa, 11-13 May 2017, 11 - 13 May 2017
- XI. **A NOTE ON SOFT SET CYRPTOSYSTEM**

- AYGÜN E.
International Conference on Mathematics and Mathematics Education(ICMME-2017), 11 - 13 May 2017
- XII. **RINGS OF SOFT SETS**
AYGÜN E.
International Conference on Mathematics and Mathematics Education(ICMME-2017), 11 - 13 May 2017
- XIII. **ON AES ENCRYPTION AND SOFT SETS**
AYGÜN E., AKBULUT S.
International Conference on Mathematics and Mathematics Education (ICMME-2017), Harran University, Şanlıurfa, 11-13 May 2017, 11 - 13 May 2017
- XIV. **ROUGH SETS AND ON DECISION-MAKING METHODS**
AYGÜN E., KAHRAMAN H.
International Conference on Mathematics and Mathematics Education (ICMME-2017), Harran University, Şanlıurfa, 11 - 13 May 2017
- XV. **ON A NEW RING STRUCTURE**
AYGÜN E.
1st International Conference of Applied Sciences, Engineering and Mathematics (ICASEM 2017), 5 - 07 May 2017
- XVI. **A NEW CYRPTOSYSTEM WITH SOFT SETS"**
AYGÜN E.
3rd International Conference on Advanced Technology & Sciences 2016, Konya, Turkey, 1 - 03 September 2016, pp.61
- XVII. **A New Cyrptosystem with Soft Sets**
AYGÜN E.
International Conference on Advanced Tecnology Sciences(ICAT'xx16), 1 - 03 September 2016
- XVIII. **Esnek Kümeler ve Simetrik Gruplar Kullanılarak Elde Edilen Kriptosistem**
AYGÜN E.
11. Ankara Matematik Günleri, Turkey, 26 - 27 May 2016
- XIX. **GROUPS AND RINGS OF SOFT SETS**
AYGÜN E.
International Conference on Mathematics and Mathematics Education, Elazığ, Turkey, 12 - 14 May 2016, pp.40
- XX. **Novel Cryptosystems**
KARATAŞ Z., AYGÜN E., LÜY E., ERGİN H., GÖNEN B.
INTERNATIONAL CONFERENCE ON MATHEMATICS AND MATHEMATICS EDUCATION, 12 - 14 May 2016
- XXI. **An Elementary Generalization on Modified Rivest Encryption**
AYGÜN E., LÜY E., KARATAŞ Z. Y.
International Conference on Natural Science and Engineering, 19 - 20 March 2016
- XXII. **Soft set Cryptosystems with symmetric groups**
AYGÜN E.
International Conference on Natural Science and Engineering (ICNASE'16), Kilis, Turkey, 19 - 20 March 2016, pp.1
- XXIII. **SOFT RADICALS**
AYGÜN E.
IV. ULUSLARARASI AVRASYA MATEMATİK BİLİMLERİ VE UYGULAMALARI KONFERANSI-IECMSA-2015, Atina, Greece, 31 August - 04 September 2015, pp.49-51
- XXIV. **A Symmetric Key Fully Homomorphic Encryption Scheme using General Chinese Remainder Theorem**
AYGÜN E., LÜY E.
V. ULUSLARARASI AVRASYA MATEMATİK BİLİMLERİ VE UYGULAMALARI KONFERANSI-IECMSA-2015, Atina, Greece, 31 August - 04 September 2015, pp.46-48
- XXV. **Soft Radicals**
AYGÜN E.
INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, IECMSA-2015, 31 August - 03 September 2015
- XXVI. **A Symetric Key Full Homomorphic Encryption Scheme using General Chinese Remainder Theorem**

LÜY E., AYGÜN E.

INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, IECMSA-2015, 31 August - 03 September 2015

XXVII. ESNEK KÜMELERİN İNVERS VE KARAKTERİSTİK ÇARPIMLARI VE KRİPTOSİSTEMİ ÜZERİNE

AYGÜN E., Canayaz T.

27. Ulusal Matematik Sempozyumu, İstanbul, Turkey, 26 August - 29 December 2014, pp.12

XXVIII. Soft Matrix Product and Soft Cryptosystem

AYGÜN E., Kılıç B.

International Conference on Algebra and Number Theory, Samsun, Turkey, 5 - 08 August 2014, pp.1

XXIX. Esnek Cisim

AYGÜN E.

XXV. Ulusal Matematik Sempozyumu, Niğde, Turkey, 5 - 08 September 2012, pp.15

XXX. Esnek Cisim ve Yakın Cisim Üzerine

AYGÜN E., ÖZDEMİR A. D.

XXIV. Ulusal Matematik Sempozyumu, Bursa, Turkey, 7 - 10 September 2011, pp.25

XXXI. Esnek Yakın-halkalar ve İdealistik Esnek Yakın-halkalar Üzerine Bir Not

Sezgin A., ATAGÜN A. O., AYGÜN E.

XXIII. Ulusal Matematik Sempozyumu, Kayseri, Turkey, 4 - 07 August 2010, pp.72

XXXII. Hereditary Radicals For Nera-rings

AYGÜN E.

International Conference on Ring and Module Theory, Ankara, Turkey, 18 - 22 August 2008, pp.19

XXXIII. Hereditary Radical For Near rings

AYGÜN E.

INTERNATIONAL CONFERENCE ON RING AND MODULE THEORY, 18 - 22 August 2008

XXXIV. Kuvvetli Kalıtsal Radikaller Üzerine

AYGÜN E., ALTINDIŞ H.

XIX Ulusal Matematik Sempozyumu, Turkey, 22 - 25 August 2006

XXXV. Kuvvetli Kalıtsal Radikaller

AYGÜN E.

XIX. Ulusal Matematik Sempozyumu, Kütahya, Turkey, 22 - 25 August 2006, pp.1

Supported Projects

AYGÜN E., ÖNER A., Project Supported by Higher Education Institutions, AES Yardımıyla Yapılan Bir Esnek Şifreleme, 2018 - 2019

AYGÜN E., AKBULUT S., Project Supported by Higher Education Institutions, Esnek Kümeler Yardımıyla Elde Edilen Yeni Bir Kriptosistem, 2017 - 2018

AYGÜN E., KORKMAZ M., Project Supported by Higher Education Institutions, Genel Lineer Gruplar Kullanılarak Yapılan Kriptosistem, 2016 - 2017

AYGÜN E., LÜY E., Project Supported by Higher Education Institutions, KARMA MODLU YENİ BİR FULL HOMOMORFİK KRİPTOSİSTEM, 2015 - 2015

GÜRCAN F., CAN H., ŞAHAN T., DELİCEOĞLU A., AYGÜN E., BİLGİL H., ARSLAN H., Project Supported by Higher Education Institutions, 23. Ulusal Matematik Sempozyumu, 2010 - 2010

AYGÜN E., SENER S., Project Supported by Higher Education Institutions, REGÜLER VE KUVVETLİ REGÜLER YAKIN-HALKALARIN İNCELENMESİ, 2009 - 2010

Scientific Refereeing

Cumhuriyet Science Journal, National Scientific Refreed Journal, September 2018

Gümüşhane Fen Bilimleri Dergisi, National Scientific Refreed Journal, February 2018
Fuzzy Information and Engineering, SCI Journal, April 2017
Annals of Fuzzy Mathematics and Informatics, SCI Journal, December 2014
Annals of Fuzzy Mathematics and Informatics, SCI Journal, August 2014
Filomat, SCI Journal, March 2013

Scientific Consultations

Kayseri Fen Lisesi / Matematik Olimpiyatları, Scientific Consultancy, Erciyes University, Fen Fakültesi, Matematik, Turkey, 2017 - 2017

Metrics

Publication: 56
Citation (WoS): 113
Citation (Scopus): 31
H-Index (WoS): 5
H-Index (Scopus): 2

Congress and Symposium Activities

International Conference on Mathematics and Mathematics Educations (ICMME-2018), Attendee, Ordu, Turkey, 2018
International Conference on Mathematics and Mathematics Education (ICMME-2017), Attendee, Şanlıurfa, Turkey, 2017
1st International Conference of Applied Sciences, Engineering and Mathematics (ICASEM 2017), Attendee, Ohrid, Macedonia, 2017
3rd International Conference on Advanced Technology & Sciences 2016, Attendee, Konya, Turkey, 2016
International Conference on Mathematics and Mathematics Education (ICMME-2016), Attendee, Elazığ, Turkey, 2016
ICNASE'16, International Conference On Natural Science and Engineering, Attendee, Kilis, Turkey, 2016
4TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Attendee, Atina, Greece, 2015
27.Ulusal Matematik Sempozyumu, Attendee, İstanbul, Turkey, 2014
International Conference on Algebra and Number Theory, Attendee, Samsun, Turkey, 2014
XXV. Ulusal Matematik Sempozyumu, Attendee, Niğde, Turkey, 2012
7. Ankara Matematik günleri, Attendee, Ankara, Turkey, 2012
XXIV. Ulusal Matematik Sempozyumu, Attendee, Bursa, Turkey, 2011
6.Ankara Matematik Günleri, Attendee, Ankara, Turkey, 2011
XXIII. Ulusal Matematik Sempozyumu, Attendee, Kayseri, Turkey, 2010
11.Antalya Cebir Günleri, Attendee, Antalya, Turkey, 2009
International Conference on Ring and Module Theory, Attendee, Ankara, Turkey, 2008
10.Antalya Cebir Günleri, Attendee, Antalya, Turkey, 2008
XIX. Ulusal Matematik Sempozyumu, Attendee, Kütahya, Turkey, 2006