

# TUNCAY KÖROĞLU

## ASST. PROF.

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Address : Karadeniz Teknik Üniversitesi Fen Fakültesi  
Matematik Bölümü

### International Researcher IDs

ScholarID: o19-ULoAAAAJ

ORCID: 0000-0002-1341-1074

Publons / Web Of Science ResearcherID: KPA-1670-2024

ScopusID: 57193790386

Yoksis Researcher ID: 40794



### Learning Knowledge

Doctorate  
2006 - 2012

Karadeniz Technical University, -, Matematik, Turkey

Postgraduate  
2002 - 2006

Karadeniz Technical University, -, Matematik, Turkey

Undergraduate  
2007 - 2001

Karadeniz Technical University, Fatih Eğitim Fakültesi, Orta Öğretim Fen Ve Matematik Alanları Eğitimi Matematik Öğretmenliği, Turkey

### Foreign Languages

English, B1 Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Akademik Düzeyde Araştırma Projesi Hazırlama, Karadeniz Teknik Üniversitesi, 2015

### Dissertations

Doctorate, Bir Tip Modüler Graf ve Fibonacci Sayıları, Karadeniz Technical University, -, Matematik, 2012

Postgraduate, Reel  $W^*$  Cebirleri için Vonm Neumann Eş Sabiti, Karadeniz Technical University, -, Matematik, 2006

## Academic Titles / Tasks

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Assistant Professor  
2018 - Continues

Karadeniz Technical University, Fen Fakültesi, Matematik

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Lecturer PhD  
2010 - 2018

Karadeniz Technical University, Fen Fakültesi, Matematik

## Published journal articles indexed by SCI, SSCI, and AHCI

- Solving Pell's equation using suborbital graphs**  
Köroğlu T.  
FILOMAT, vol.38, no.19, pp.6863-6870, 2024 (SCI-Expanded)
- A PRINCIPAL TOPOLOGY OBTAINED FROM UNINORMS**  
Karaçal F., Köroğlu T.  
KYBERNETIKA, vol.58, no.6, pp.863-882, 2022 (SCI-Expanded)
- The normalizer of  $\Gamma(k)(0)(n)$**   
Sanli Z., KÖROĞLU T., GÜLER B. Ö.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.42, no.16, pp.5403-5415, 2019 (SCI-Expanded)
- Suborbital graphs for the Atkin-Lehner group**  
KÖROĞLU T., GÜLER B. Ö., Sanli Z.  
TURKISH JOURNAL OF MATHEMATICS, vol.41, no.2, pp.235-243, 2017 (SCI-Expanded)
- NOTES ON LOCALLY INTERNAL UNINORM ON BOUNDED LATTICES**  
ÇAYLI G. D., ERTUĞRUL Ü., KÖROĞLU T., KARAÇAL F.  
KYBERNETIKA, vol.53, no.5, pp.911-921, 2017 (SCI-Expanded)
- Solutions to some congruence equations via suborbital graphs**  
GÜLER B. Ö., Kor T., Sanli Z.  
SPRINGERPLUS, vol.5, 2016 (SCI-Expanded)
- Solutions to some congruence equations via suborbital graphs**  
GÜLER B. Ö., KÖROĞLU T., ŞANLI Z.  
SPRINGERPLUS, vol.1327, pp.1-11, 2016 (SCI-Expanded)
- Disconnectedness of the subgraph F-3 for the group  $\Gamma(3)$**   
AKBAŞ M., Kor T., KESICIOĞLU Y.  
JOURNAL OF INEQUALITIES AND APPLICATIONS, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- SOME GROUP ACTIONS AND FIBONACCI NUMBERS**  
Sanli Z., Köroğlu T.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.71, no.1, pp.273-284, 2022 (ESCI)
- New Riemann–Liouville fractional Hermite–Hadamard type inequalities for harmonically convex functions**  
Şanlı Z., Kunt M., Köroğlu T.  
Arabian Journal of Mathematics, vol.9, no.2, pp.431-441, 2020 (ESCI)
- IMPROVED HERMITE-HADAMARD TYPE INEQUALITIES FOR CONVEX FUNCTIONS VIA KATUGAMPOLA FRACTIONAL INTEGRALS**

Sanli Z., KUNT M., KÖROĞLU T.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.37, no.2, pp.461-474, 2019 (ESCI)

4. **IMPROVED HERMITE HADAMARD TYPE INEQUALITIES FOR HARMONICALLY CONVEX FUNCTIONS VIA KATUGAMPOLA FRACTIONAL INTEGRALS**

Sanli Z., KÖROĞLU T., KUNT M.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.2, pp.1556-1575, 2019 (ESCI)

5. **Directed Suborbital Graphs on the Poincare Disk**

BEŞENK M., KÖROĞLU T.

Karaelmas Science and Engineering Journal, vol.8, no.2, pp.555-560, 2018 (Peer-Reviewed Journal)

6. **Suborbital graphs of a power subgroup of the modular group**

ŞANLI Z., KÖROĞLU T., GÜLER B. Ö.

NEW TRENDS in MATHEMATICAL SCIENCES, vol.6, pp.139-144, 2018 (Peer-Reviewed Journal)

7. **NEW CONFORMABLE FRACTIONAL HERMITE HADAMARD TYPE INEQUALITIES FOR HARMONICALLY CONVEX FUNCTIONS**

Sanli Z., KÖROĞLU T.

JOURNAL OF MATHEMATICAL ANALYSIS, vol.9, no.6, pp.77-91, 2018 (ESCI)

8. **Some Generalized Suborbital Graphs**

KÖROĞLU T., GÜLER B. Ö., Şanlı Z.

Turkish Journal of Mathematics and Computer Science, no.7, pp.90-95, 2017 (Peer-Reviewed Journal)

9. **Orbital Graphs for the Small Residue Class of  $PSL(2,5)$**

BEŞENK M., GÜLER B. Ö., KÖROĞLU T.

GENERAL MATHEMATICAL NOTES, vol.37, pp.20-31, 2016 (Peer-Reviewed Journal)

10. **Orbital Graphs for the Small Residue Class of  $PSL(2,5)$**

BEŞENK M., GÜLER B. Ö., KÖROĞLU T.

General Mathematics Notes, vol.37, pp.20-31, 2016 (Peer-Reviewed Journal)

11. **NEW GENERAL INTEGRAL INEQUALITIES FOR LIPSCHITZIAN FUNCTIONS VIA RIEMANN-LIOUVILLE FRACTIONAL INTEGRALS AND APPLICATIONS**

İşcan İ., Kunt M., Yazıcı Gözütok N., Köroğlu T.

JOURNAL OF INEQUALITIES AND SPECIAL FUNCTIONS, vol.7, no.4, pp.1-12, 2016 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

1. **On The Connectivity Of Modular Graphs Produced By Atkin Lehner Group**

Köroğlu T., Değer A. H.

4th International Congress of Turkish World Educational Sciences and Social Sciences, Antalya, Turkey, 30 November - 03 December 2023, pp.183-186

2. **Identities Generated From Some Number Sequences Similar To Fibonacci and Lucas Number Sequences**

Değer A. H., Köroğlu T.

4th International Congress of Turkish World Educational Sciences and Social Sciences, Antalya, Turkey, 30 November - 03 December 2023, pp.187-190

3. **CONNECTIONS BETWEEN SPECIAL NUMBER SEQUENCES AND CONTINUED FRACTIONS**

Değer A. H., Köroğlu T.

2. INTERNATIONAL TURKISH WORLD ENGINEERING AND SCIENCE CONGRESS, Antalya, Turkey, 7 - 10 November 2019, pp.558-569

4. **PASCAL NUMBERS AND MOBIUS TRANSFORMATIONS**

Köroğlu T., Değer A. H.

2. INTERNATIONAL TURKISH WORLD ENGINEERING AND SCIENCE CONGRESS, Antalya, Turkey, 7 - 10 November

2019, pp.564-569

5. **The Guiding Role of Dynamic Mathematics Software to Solve a Real-Life Problem: Tea Cup Problem**  
KÖSA T., KÖROĞLU T.  
15th International Geometry Symposium, 3 - 06 July 2017
6. **Congruence Equations to Suborbital Graphs**  
KÖROĞLU T., GÜLER B. Ö., ŞANLI Z.  
15. International Gemetry Symposium, Amasya, Turkey, 3 - 06 June 2017
7. **On the Geometry of Modular Group**  
KÖROĞLU T., Şanlı Z., GÜLER B. Ö.  
15. International Gemetry Symposium, Amasya, Turkey, 3 - 06 June 2017, pp.232
8. **Gamma3 Grubunun Genişletilmiş Rasyonel Sayılar Üzerindeki Hareketi ve Fibonacci Sayıları**  
KÖROĞLU T.  
14. Matematik Sempozyumu, Niğde, Turkey, 14 - 16 May 2015, pp.74
9. **Some notes on locally internal uninorm on bounded lattices**  
KÖROĞLU T., ÇAYLI G. D., ERTUĞRUL Ü., KARAÇAL F.  
International Conference on Mathematics and Mathematics Education (ICMME 2017), Şanlıurfa, Turkey, 11 - 13 May 2017, pp.166-167
10. **On Primitive Action of Atkin Lehner Group**  
Şanlı Z., KÖROĞLU T., GÜLER B. Ö.  
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, İstanbul, Turkey, 10 - 12 May 2017, pp.368
11. **On Trees of the Group Gamma Square**  
Şanlı Z., KÖROĞLU T., GÜLER B. Ö.  
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, İstanbul, Turkey, 10 - 12 May 2017, pp.381
12. **Some Generalized Suborbital Graphs**  
KÖROĞLU T., GÜLER B. Ö., ŞANLI Z.  
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017, pp.162-163
13. **Some notes on locally internal uninorm on bounded lattices**  
KÖROĞLU T., ÇAYLI G. D., ERTUĞRUL Ü., KARAÇAL F.  
International Conference on Mathematics and Mathematics Education, ICMME 2017, Şanlıurfa, Turkey, 11 - 13 May 2017, pp.166-167
14. **Some Notes On Locally Internal Uninorm On Bounded Lattices**  
KÖROĞLU T., ÇAYLI G. D., ERTUĞRUL Ü., KARAÇAL F.  
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017, pp.166-167
15. **New Ostrowski Type Inequalities for Harmonically Quasi-Convex Functions**  
Köroğlu T., İşcan İ., Kunt M.  
Xth International Statistics Days Conference (ISDC'2016), Giresun, Turkey, Giresun, Turkey, 7 - 09 October 2016, pp.769-776
16. **Statistical Mechanics and Modular Group**  
GÜLER B. Ö., KÖROĞLU T.  
Xth International Statistics Days Conference (ISDC 2016), Giresun, Turkey, 7 - 09 October 2016, pp.814-820
17. **Suborbital Graphs For The Residue Class Of  $PSL(2, Z_n)$**   
BEŞENK M., GÜLER B. Ö., KÖROĞLU T.  
2. International Conference on Analysis and its Applications, Kırşehir, Turkey, 12 - 15 July 2016, pp.73
18. **Commutator Subgroup of Modular Group and Fibonacci Numbers**  
KÖROĞLU T.  
Conference on Mathematics and Mathematics Education, Elazığ, Turkey, 12 - 14 May 2016, pp.37
19. **Suborbital Graphs of Atkin-Lehner Group**

KÖROĞLU T.

International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 8 - 12 June 2015, pp.333

20. **Disconnectedness of the Subgraph  $F^3$  for the Group  $\Gamma^3$**

AKBAŞ M., KÖROĞLU T., Kesicioğlu Y.

International Congress in Honour of Professor H. M. Srivastava, Bursa, Turkey, 23 - 26 August 2012, pp.91

21. **On Some Advantages of Using Mathematics Software**

Kor T., DEĞER A. H., Besenk M., Guler B. O.

16th Asian Technology Conference in Mathematics (ATCM2011), Bolu, Turkey, 19 - 23 September 2011, pp.203-210

22. **Reel  $W^*$  Cebirleri İçin Von Neumann Eş Sabiti**

Cansu M. N., KÖROĞLU T., Kesicioğlu Y.

XIX. Ulusal Matematik Sempozyumu, Kütahya, Turkey, 22 - 25 August 2006, vol.1, no.1, pp.458-472

23. **Reel Sonlu Faktörler İçin İndeks Kavramı**

Rakhimov A., KÖROĞLU T., Kesicioğlu Y.

XX. Ulusal Matematik Sempozyumu, Erzurum, Turkey, 22 - 25 August 2005, pp.9

## Courses

ANALİZ-IV, Undergraduate, 2018 - 2019

Kompleks Analiz, Undergraduate, 2017 - 2018

ANALİZ 2, Undergraduate, 2017 - 2018

GENEL TOPOLOJİ, Undergraduate, 2016 - 2017

ANALİZ1, Undergraduate, 2016 - 2017

Sosyal Bilimler İçin Matematik 1, Undergraduate, 2015 - 2016

MÜHENDİSLİK MATEMATİĞİ, Undergraduate, 2013 - 2014

DİFERANSİYEL DENKLEMLER, Undergraduate, 2014 - 2015, 2013 - 2014

Sosyal Bilimler İçin Matematik 1, Undergraduate, 2014 - 2015

Matematik 2, Undergraduate, 2013 - 2014, 2010 - 2011

DİFERANSİYEL DENKLEMLER, Undergraduate, 2014 - 2015, 2013 - 2014

MATEMATİK 1, Undergraduate, 2014 - 2015

Diferansiyel Denklemler, Undergraduate, 2014 - 2015, 2011 - 2012

Diferansiyel Denklemler, Undergraduate, 2014 - 2015, 2013 - 2014, 2011 - 2012

GENEL MATEMATİK, Undergraduate, 2013 - 2014

DİFERANSİYEL DENKLEMLER, Undergraduate, 2013 - 2014

Matematik 2, Undergraduate, 2011 - 2012

Matematik II, Undergraduate, 2011 - 2012

Mühendislik Matematiği, Undergraduate, 2011 - 2012

Mühendislik Matematiği, Undergraduate, 2011 - 2012

Matematik 1, Undergraduate, 2011 - 2012

Matematik 3 (dif. Denk.), Undergraduate, 2011 - 2012

Matematik 2, Undergraduate, 2010 - 2011

## Metrics

Publication: 42

Citation (WoS): 29

Citation (Scopus): 32

H-Index (WoS): 4

H-Index (Scopus): 4

## Research Areas

Mathematics, Natural Sciences

## Non Academic Experience

KARADENİZ TEKNİK ÜNİVERSİTESİ

Trabzon Lisesi

Maçka Lisesi /Trabzon

Özdil İ.Ö.O. /Trabzon

Arman Polat İ.Ö.O.