

Prof. NİLÜFER TOPSAKAL

Personal Information

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International Researcher IDs

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Education Information

Associate Degree, Anadolu University, Open Education Faculty, Department Of Theology, Turkey 2017 - 2020

Doctorate, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, Turkey 2003 - 2008

Postgraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2000 - 2003

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 1996 - 2000

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2020 - Continues

Associate Professor, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2014 - 2020

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2009 - 2014

Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2003 - 2008

Academic and Administrative Experience

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, 2017 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Sivas Cumhuriyet University, Gemerek Meslek Yüksekokulu, 2016 - 2018

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2012 - 2018

Fakülte Kurulu Üyesi, Sivas Cumhuriyet University, Fen Fakültesi, 2014 - 2017

Courses

Seminer Dersi, Postgraduate, 2018 - 2019

Mühendislik Matematiği, Undergraduate, 2019 - 2020

Sayısal Analiz, Undergraduate, 2018 - 2019

Kısmi Türevli Diferansiyel Denklemlerin Sayısal Çözümü, Postgraduate, 2019 - 2020

Mühendislik Matematiği, Undergraduate, 2019 - 2020
Nümerik Analiz, Undergraduate, 2019 - 2020
Fark Denklemleri I, Postgraduate, 2019 - 2020
Mühendislik Matematiği, Undergraduate, 2018 - 2019
Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020
Analitik Geometri ve Trigonometri, Undergraduate, 2017 - 2018
Diferansiyel Denklemler, Undergraduate, 2018 - 2019
Kompleks Değişkenli Fonks. - II, Undergraduate, 2017 - 2018
Kompleks Değişkenli Fonks. - II, Undergraduate, 2017 - 2018
Diferansiyel Denklemler, Undergraduate, 2018 - 2019
Bitirme Ödevi/Tezi, Undergraduate, 2018 - 2019
Bitirme Ödevi/Tezi, Undergraduate, 2017 - 2018
Kompleks Değişkenli Fonks. - I, Undergraduate, 2017 - 2018
Kompleks Değişkenli Fonks. - I, Undergraduate, 2017 - 2018
Sayısal Analiz, Undergraduate, 2016 - 2017
Analitik Geometri ve Trigonometri, Undergraduate, 2016 - 2017
Genel Matematik - II, Undergraduate, 2015 - 2016
Genel Matematik - I, Undergraduate, 2016 - 2017
Genel Matematik - II, Undergraduate, 2015 - 2016
Genel Matematik - II, Undergraduate, 2015 - 2016
Genel Matematik - I, Undergraduate, 2016 - 2017
Genel Matematik - II, Undergraduate, 2015 - 2016
Genel Matematik - I, Undergraduate, 2016 - 2017
Mühendislik Matematiği, Undergraduate, 2015 - 2016
Yöneylemler ve Dizeler, Undergraduate, 2014 - 2015
Genel Matematik - I, Undergraduate, 2015 - 2016
Yöneylemler ve Dizeler, Undergraduate, 2014 - 2015
Yöneylemler ve Dizeler, Undergraduate, 2014 - 2015
Genel Matematik II, Undergraduate, 2014 - 2015
Sturm Liouville Operatörler İçin Düz Problem, Postgraduate, 2014 - 2015
Genel Matematik - I, Undergraduate, 2014 - 2015
Genel Matematik - II, Undergraduate, 2013 - 2014
Genel Matematik - II, Undergraduate, 2013 - 2014
Genel Matematik - I, Undergraduate, 2014 - 2015
Genel Matematik I, Undergraduate, 2014 - 2015
Uygulamalı Matematik, Undergraduate, 2012 - 2013
Analitik Geometri II, Undergraduate, 2012 - 2013
Analitik Geometri II, Undergraduate, 2012 - 2013
Kısmi Türevli Dif. Denk., Undergraduate, 2013 - 2014
Kısmi Türevli Dif. Denk., Undergraduate, 2013 - 2014
Analitik Geometri - II, Undergraduate, 2012 - 2013
Uygulamalı Matematik, Undergraduate, 2012 - 2013
Analitik Geometri - II, Undergraduate, 2012 - 2013
Analiz - I, Undergraduate, 2012 - 2013
Analitik Geometri I, Undergraduate, 2012 - 2013
Diferansiyel Denk., Undergraduate, 2012 - 2013
Analiz-I, Undergraduate, 2012 - 2013
Diferansiyel Denklemler, Undergraduate, 2011 - 2012
Analiz - I, Undergraduate, 2012 - 2013
Diferansiyel Denklemler, Undergraduate, 2011 - 2012
Analitik Geometri I, Undergraduate, 2012 - 2013

Analiz-I, Undergraduate, 2012 - 2013
Analiz III, Undergraduate, 2011 - 2012
Analiz III, Undergraduate, 2011 - 2012
Yöneylemler ve Dizeler, Undergraduate, 2011 - 2012
Diferansiyel Denklemler II, Undergraduate, 2010 - 2011
Diferansiyel Denklemler, Undergraduate, 2011 - 2012
Diferansiyel Denklemler - II, Undergraduate, 2010 - 2011
Yüksek Matematik, Undergraduate, 2009 - 2010
Diferansiyel Denklemler, Undergraduate, 2009 - 2010
Yüksek Matematik, Undergraduate, 2009 - 2010
Analitik Geometri - II, Undergraduate, 2008 - 2009
Analitik Geometri, Undergraduate, 2009 - 2010
Analitik Geometri - II, Undergraduate, 2008 - 2009
Analitik Geometri - I, Undergraduate, 2009 - 2010
Diferansiyel Denklemler, Undergraduate, 2009 - 2010
Diferansiyel Denklemler, Undergraduate, 2009 - 2010
Diferansiyel Denklemler Ve Lineer Cebir, Undergraduate, 2008 - 2009
Analitik Geometri - I, Undergraduate, 2008 - 2009
Diferansiyel Denklemler Ve Lineer Cebir, Undergraduate, 2008 - 2009

Advising Theses

Topsakal N., Kangalgil F., , AYRIK ZAMANLI AV-AVCI POPÜLASYON MODELİNDE DENGİ NOKTALARININ TOPOLOJİK SINIFLANDIRILMASI, KARARLILIK VE FLİP ÇATALLANMA ANALİZİ, Postgraduate, N.ÖZTÜRK(Student), 2022
Topsakal N., GÖÇE BAĞLI AYRIK ZAMANLI AV-AVCI POPÜLASYON MODELİNİN KARARLILIĞI, Postgraduate, H.KILIÇ(Student), 2020
Topsakal N., Toda Lattice denklemi için bazı tam çözümler, Postgraduate, A.ASKAR(Student), 2019
TOPSAKAL N., Ters saçılım dönüşümü (TSD) ve Soliton teorisi, Postgraduate, M.KURT(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Analyzing bifurcation, stability, and chaos control for a discrete-time prey-predator model with Allee effect**
Kangalgil F., Topsakal N., Öztürk N.
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.6, pp.2047-2068, 2022 (SCI-Expanded)
- II. **ON INVERSE PROBLEM FOR SINGULAR STURM-LIOUVILLE OPERATOR WITH DISCONTINUITY CONDITIONS**
AMİROV R., TOPSAKAL N.
BULLETIN OF THE IRANIAN MATHEMATICAL SOCIETY, vol.40, no.3, pp.585-607, 2014 (SCI-Expanded)
- III. **On impulsive Sturm-Liouville operators with singularity and spectral parameter in boundary conditions**
Guldu Y., Amirov R. K., Topsakal N.
UKRAINIAN MATHEMATICAL JOURNAL, vol.64, no.12, pp.1816-1838, 2013 (SCI-Expanded)
- IV. **ON IMPULSIVE STURM-LIOUVILLE OPERATORS WITH COULOMB POTENTIAL AND SPECTRAL PARAMETER LINEARLY CONTAINED IN BOUNDARY CONDITIONS**
Amirov R., Topsakal N., Guldu Y.
UKRAINIAN MATHEMATICAL JOURNAL, vol.62, no.9, pp.1345-1366, 2011 (SCI-Expanded)
- V. **Inverse Problem for Sturm-Liouville Operators with Coulomb Potential which have Discontinuity Conditions Inside an Interval**

AMİROV R., TOPSAKAL N., GÜLDÜ Y.

MATHEMATICAL PHYSICS ANALYSIS AND GEOMETRY, vol.13, no.1, pp.29-46, 2010 (SCI-Expanded)

VI. Inverse Problem for Sturm-Liouville Operators with Coulomb Potential which have Discontinuity Conditions Inside an Interval

Topsakal N., AMİROV R.

MATHEMATICAL PHYSICS ANALYSIS AND GEOMETRY, vol.13, no.1, pp.29-46, 2010 (SCI-Expanded)

VII. Sturm-Liouville operators with Coulomb potential which have discontinuity conditions inside an interval

Amirov R., Topsakal N.

INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, vol.19, no.12, pp.923-937, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. ON GLM TYPE INTEGRAL EQUATION FOR SINGULAR STURM-LIOUVILLE OPERATOR WHICH HAS DISCONTINUOUS COEFFICIENT

TOPSAKAL N., AMİROV R.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.71, no.2, pp.305-325, 2022 (ESCI)

II. Stability Analysis of a Discrete-Time Prey-Predator Population Model with Immigration

KILIÇ H., TOPSAKAL N., KANGALGİL F.

Cumhuriyet Sciences Journal, vol.41, no.4, pp.884-900, 2020 (Peer-Reviewed Journal)

III. STABILITY ANALYSIS AND FLIP BIFURCATION OF A DISCRETE-TIME PREY-PREDATOR MODEL WITH PREDATOR IMMIGRATION

KANGALGİL F., TOPSAKAL N.

Asian Journal of Mathematics and Computer Research, vol.27, no.3, pp.1-10, 2020 (Peer-Reviewed Journal)

IV. On a Class of Dirac Operators with Eigenvalue Nonlinearly Dependent to Boundary Condition

Topsakal N., Amirov R.

Asian Journal of Mathematics and Computer Research, 2019 (Peer-Reviewed Journal)

V. Inverse Problem for Sturm-Liouville Operators with Singularity and Discontinuity Conditions Inside an Interval

GÜLDÜ Y., AMİROV R., TOPSAKAL N.

Journal of Advanced Research in Applied Mathematics, vol.6, no.1, pp.95-117, 2014 (Peer-Reviewed Journal)

VI. Inverse problem for Sturm Liouville operators with singularity and discontinuity conditions inside an interval

GÜLDÜ Y., AMİROV R., TOPSAKAL N.

, Journal of Advanced Research in Applied Math, 2013 (Peer-Reviewed Journal)

VII. Half Inverse Problem for Singular Sturm Liouville Operator with Discontinuity Conditions Inside an Interval

TOPSAKAL N., GÜLDÜ Y., AMİROV R.

Cumhuriyet Üniversitesi Fen Fakültesi Fen Bilimleri Dergisi, vol.33, no.2, pp.1-7, 2012 (Peer-Reviewed Journal)

VIII. Inverse Problem for Dirac Differential Operators with Eigenvalue Linearly Dependent to Condition

TOPSAKAL N.

Journal of Advanced Research in Applied Mathematics, vol.4, no.4, pp.12-25, 2012 (Peer-Reviewed Journal)

IX. Sonlu Aralıkta Coulomb Potansiyele Sahip Sturm Liouville Diferansiyel Denklemlerin Çözümleri İçin Bir Gösterilim

AMİROV R., TOPSAKAL N.

Cumhuriyet Üniversitesi Fen Fakültesi Fen Bilimleri Dergisi, vol.28, no.2, pp.11-38, 2007 (Peer-Reviewed Journal)

X. Sonlu Aralıkta Coulomb Potansiyele Sahip Sturm Liouville Diferansiyel Denklemlerin Çözümleri İçin Bir Gösterilim

AMİROV R., TOPSAKAL N.

Books & Book Chapters

I. Diferansiyel Denklemler Teorisi ve Çözümlü Örnekler

Amirov R., Topsakal N., Ünlü M.

Nobel, Ankara, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Analyzing Neimark-Sacker Bifurcation and Stability for a Discrete-Time Prey- Predator Model with Allee Effect**
Öztürk N., KANGALGİL F., TOPSAKAL N.
1st International Symposium on Current Developments in Fundamental and Applied Mathematics Sciences, Erzurum, Turkey, 23 - 25 May 2022
- II. **Analyzing Period-Doubling Bifurcation and Stability for a Discrete-Time Prey- Predator Model with Allee Effect**
Öztürk N., Kangalgil F., Topsakal N.
2 nd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 March 2022, pp.228
- III. **AYRIK ZAMANLI GÖÇ PARAMETRESİNE BAĞLI BİR AV-AVCI POPÜLASYON MODELİNİN KARARLILIĞI**
KILIÇ H., TOPSAKAL N., KANGALGİL F.
İzmir Matematik Günleri-III, Turkey, 1 - 02 October 2020
- IV. **GÖÇE BAĞLI AYRIK ZAMANLI, AV-AVCI POPÜLASYON MODELİNİN KARARLILIĞI**
KILIÇ H., TOPSAKAL N.
3. ULUSLARARASI İSTATİSTİK MATEMATİK VE ANALİTİK YÖNTEMLER KONGRESİ, 12 March 2020
- V. **ALGORITHMS TO HAVE EXACT SOLUTION OF SOME NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS**
TOPSAKAL N.
2. Uluslararası Battal Gazi Multi Disipliner Çalışmalar Kongresi, 15 - 17 March 2019
- VI. **Dirac Operators with Eigenvalue Nonlinearly Dependent to BoundaryCondition**
TOPSAKAL N., AMİROV R.
II. International Congress on New Trends in Science, Engineering and Technology, 3 - 07 September 2018
- VII. **Inverse problem for singular Sturm-Liouville operator which has discontinuous coefficient**
TOPSAKAL N., AMİROV R.
International Conference on Computational Mathematic and Engineering Sciencess, 4 - 06 May 2018
- VIII. **Inverse problem for a Class of Dirac Operators with eigenvalue linearly dependent to boundary condition**
TOPSAKAL N., AMİROV R.
International Conference on Computational Mathematic and Engineering Sciencess, 4 - 06 May 2018
- IX. **Inverse problem for a Class of Dirac Operators**
TOPSAKAL N., AMİROV R.
International Congress on Mathematic, Engineering and Natural Sciences, 21 - 22 April 2018
- X. **On GLM type main integral equation for singular Sturm-Liouville operator which has discontinuous coefficient**
TOPSAKAL N., AMİROV R.
International Congress on Mathematic, Engineering and Natural Sciences, 21 - 22 April 2018
- XI. **Exact Solutions to Some Nonlinear Partial Differential Equations**
TOPSAKAL N., KANGALGİL F.

- 2nd International Science Symposium-Science Festival, Tiflis, Georgia, 5 - 08 September 2017
- XII. **On a Class of Dirac Operators with Eigenvalue Nonlinearly Dependent to Boundary Condition"**
TOPSAKAL N., AMİROV R.
2nd International Science Symposium-Science Festival, Tiflis, Georgia, 5 September - 08 December 2017
- XIII. **Exact Solutions of Some Nonlinear Partial Differential Equations in Mathematical Physics**
KANGALGİL F., TOPSAKAL N.
2nd International Science Symposium-Science Festival, Tiflis, Georgia, 5 - 08 September 2017
- XIV. **Exact Solutions to the Toda Lattice Equations**
TOPSAKAL N.
International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017
- XV. **A Class of First Kind Volterra Integral Equation**
TOPSAKAL N.
International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017
- XVI. **Sine-Gordon Denklemi için Bazı Tam Çözümler**
TOPSAKAL N.
Sine-Gordon Denklemi için Bazı Tam Çözümler, Sivas, Turkey, 1 - 03 May 2015
- XVII. **Some Exact Solutions to the Toda Lattice Equations**
TOPSAKAL N., Kurt M.
International Conference on Nonlinear Differential and Difference Equations: Recent Developments and Applications, 27 - 29 May 2014
- XVIII. **Inverse problem for Dirac Operators with Discontinuity Conditions Inside an Interval**
TOPSAKAL N., ÇAKMAK Y., AMİROV R.
Mathematical Analysis, Differential Equations and Their Applications, Mersin, Turkey, 4 - 09 October 2012
- XIX. **An Interior Inverse Problem for Sturm Liouville Operator with Coulomb Potential and Discontinuity Conditions**
TOPSAKAL N., AMİROV R.
International conference on Mathematical Analysis, Differential Equations and Their applications, 4 - 09 September 2012
- XX. **On a Volterra Integral Equation**
TOPSAKAL N.
XXIV. Ulusal Matematik Sempozyumu, Turkey, 07 September 2011 - 10 September 2010
- XXI. **On Impulsive Sturm Liouville Operators with Coulomb Potential and Spectral Parameter Linearly Contained in Boundary Conditions**
TOPSAKAL N., GÜLDÜ Y.
Workshop on Differential Equations and Applications IV, 30 April - 02 May 2010
- XXII. **Inverse problem for Sturm Liouville operators with Coulomb potential which have discontinuity conditions inside an interval**
TOPSAKAL N., AMİROV R.
4. Ankara Matematik Günleri, Ankara, Turkey, 4 - 05 June 2009
- XXIII. **Sonlu Aralıkta Süreksizlik Koşullarına Sahip Coulomb Potansiyelli Sturm Liouville Operatörleri Üzerine**
TOPSAKAL N., AMİROV R.
XXI. Ulusal Matematik Sempozyumu, İstanbul, Turkey, 1 - 04 September 2008, pp.11
- XXIV. **Sonlu Aralıkta Coulomb Potansiyele Sahip Sturm Liouville Diferansiyel Denklemlerin Çözümleri**
TOPSAKAL N., AMİROV R.
XX. Ulusal Matematik Sempozyumu, Erzurum, Turkey, 3 - 06 September 2007, pp.11

Supported Projects

Topsakal N., Kangalgil F., Project Supported by Higher Education Institutions, Ayrık Zamanlı Av-Avcı Popülasyon

Modelinde Denge Noktalarının Topolojik Sınıflandırılması, Kararlılık ve Flip Çatallanma Analizi, 2020 - 2022
Topsakal N., Project Supported by Higher Education Institutions, Göçe Bağlı Ayrık Zamanlı, Av-Avcı Popülasyon Modelinin Kararlılığı, 2019 - 2020

Activities in Scientific Journals

International Journal of Mathematics and Systems Science, Committee Member, 2020 - Continues

Independent Journal of Management & Production, Committee Member, 2018 - Continues

Cumhuriyet Science Journal, Editor, 2009 - Continues

International Journal of Mathematical Physics, Committee Member, 2008 - Continues

Metrics

Publication: 43

Citation (WoS): 28

Citation (Scopus): 28

H-Index (WoS): 3

H-Index (Scopus): 3

Non Academic Experience

University of Texas at Arlington