Assoc. Prof.
Yonca SEZER

YTU YILDIZ TEKNIK
ÜNIVERSITES

Personal Information

Office Phone: +90 212 383 4330
Email: ysezer@yildiz.edu.tr
Other Email: yonsezer@gmail.com
Web:
https://avesis.yildiz.edu.tr/ysezer

International Researcher IDs
ScholarID: qr1eaGUAAAAJ
ORCID: 0000-0003-3072-8302
Publons / Web Of Science
ResearcherID: AAC-8076-2021
ScopusID: 36553265800
Yoksis Researcher ID: 188265

Education Information

Doctorate, Yildiz Technical
University, Turkey 2002 - 2007
Postgraduate, Yildiz Technical
University, Faculty Of Arts & Science,
Department Of Mathemeatics,
Turkey 2000 - 2002
Undergraduate, Marmara University,
Faculty Of Arts And Sciences,
Mathematics, Turkey 1995 - 1999

Research Areas

Mathematics, Functional Analysis, Natural Sciences

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2018 - Continues
Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2000 - Continues

Academic and Administrative Experience

Vice Dean, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2023 - Continues
Deputy Head of Department, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2022 - 2023
Bölüm Stratejik Plan Komisyonu Başkanı, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2017 - 2020
Bölüm Kalite Komisyonu Üyesi, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2014 - 2017

Courses

Doctorate
SEMİNER, Doctorate, 2022 - 2023
Postgraduate
Hilbert Uzayları, Postgraduate, 2020 - 2021
Hilbert Space, Postgraduate, 2020 - 2021
Lineer Operatörler 2, Postgraduate, 2018 - 2019
İleri Lineer Operatörler 1, Postgraduate, 2018 - 2019
Undergraduate
Diferansiyel Denklemler 2 , Undergraduate, 2022 - 2023
Differential Equations, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
TASARIMCILAR İÇİN MATEMATİK, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Mathematics 2, Undergraduate, 2021 - 2022, 2020 - 2021
MATEMATİK 1, Undergraduate, 2021 - 2022, 2018 - 2019
Mathematics For Designers, Undergraduate, 2019 - 2020, 2018 - 2019
DİFERANSİYEL DENKLEMLER, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017
LİNEER CEBİR, Undergraduate, 2019 - 2020
MATEMATİK 2, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

Supervised Theses

Sezer Y., Bilalov B., t-BAZ KAVRAMI VE BOCHNER UZAYLARINDA FABER POLINOMLARININ t-BAZLIGI, Postgraduate, A.BÜYÜKARSLAN(Student), 2025
Sezer Y., Bilalov B., LAPLACE DENKLEMI IÇIN YEREL OLMAYAN BIR SINIR DEGER PROBLEMININ ORLICZ SOBOLEV UZAYLARINDA GÜÇLÜ ÇÖZÜLEBILIRLIGI, Postgraduate, Ü.Ildız(Student), 2025
Sezer Y., Bilalov B., HARMONIK FONKSIYONLARIN STANDART OLMAYAN BANACH UZAYLARI VE BAZI ÖZELLIKLERI, Postgraduate, E.Yaşar(Student), 2025
Sezer Y., Kesirli Diferansiyel Denklemler İçin Nümerik Metotlar, Postgraduate, M.ERTÜRK(Student), 2023
Sezer Y., Kesirli Diferansiyel Denklemlere Genel Bakış, Postgraduate, B.BAĞLIK(Student), 2023
Sezer Y., KARAR ALMA SÜREÇLERINDE BÜYÜK VERI KULLANIMI VE MATEMATİKSEL MODELLEME, Postgraduate, B.AKDAŞ(Student), 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Trace regularization problem for a fourth-order differential operator on separable Banach space**
Bakşi Ö., Sezer Y., Caliskan S.
Mathematical Methods in the Applied Sciences, vol.48, no.4, pp.4578-4591, 2025 (SCI-Expanded)

II. **On solvability of polyharmonic Dirichlet problem in symmetric Sobolev spaces**
Bilalov B. T., Sadigova S. R., SEZER Y., Nasibova N. P.
Mathematical Methods in the Applied Sciences, vol.47, no.18, pp.14386-14401, 2024 (SCI-Expanded)

III. **Asymptotic formula for the sum of eigenvalues of fourth order differential operator on Banach space**
BAKŞİ Ö., SEZER Y.
Filomat, vol.38, no.17, pp.6059-6086, 2024 (SCI-Expanded)

IV. **The Second Regularized Trace of Even Order Differential Operators with Operator Coefficient**
Bakşi Ö., Sezer Y.
FILOMAT, vol.36, no.4, pp.1069-1080, 2022 (SCI-Expanded)

V. **On Higher Regularized Traces of a Differential Operator with Bounded Operator Coefficient Given in a Finite Interval**
SEZER Y., BAKŞİ Ö., KARAYEL S.
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.18, no.3, 2021 (SCI-Expanded)

VI. **Second regularized trace of a differential operator with second order unbounded operator coefficient**

given in a finite interval

Bakşi Ö., Karayel S., Sezer Y.

Operators and Matrices, vol.11, pp.735-747, 2017 (SCI-Expanded)

VII.   **THE ASYMPTOTIC FORMULAS FOR THE SUM OF SQUARES OF NEGATIVE EIGENVALUES OF A SINGULAR STURM-LIOUVILLE OPERATOR**

Sezer Y.

UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, vol.79, no.4, pp.69-82, 2017 (SCI-Expanded)

VIII.   **The regularized trace formula for a fourth order differential operator given in a finite interval**

Karayel S., Sezer Y.

JOURNAL OF INEQUALITIES AND APPLICATIONS, 2015 (SCI-Expanded)

IX.   **The regularized trace of a self adjoint differential operator of higher order with unbounded operator coefficient**

Adiguzelov E., Sezer Y.

APPLIED MATHEMATICS AND COMPUTATION, vol.218, pp.2113-2121, 2011 (SCI-Expanded)

X.   **The second regularized trace of a self adjoint differential operator given in a finite interval with bounded operator coefficient**

Adiguzelov E., Sezer Y.

MATHEMATICAL AND COMPUTER MODELLING, vol.53, pp.553-565, 2011 (SCI-Expanded)

Articles Published in Other Journals

I.   **On Solvability Of One Boundary Value Problem For Laplace Equation in Banach-Hardy Classes**

Mamedov E., SEZER Y., Safarova A.

Journal of Contemporary Applied Mathematics, vol.15, no.1, pp.25-43, 2025 (Scopus)

II.   **Time-Ordered Evolutionson the Feynman-Dyson Hilbert Space**

Gül E., Gill T. L., Bakşi Ö., Kızılbudak Çalışkan S., Kara Hansen A., Karayel S., Sezer Y.

BOLETIM DA SOCIEDADE PARANAENSE DE MATEMATICA, vol.45, no.1, pp.1-20, 2025 (ESCI)

III.   **Some Remarks on Integral Operators in Banach Function Spaces and Representation Theorems in Banach-Sobolev Spaces**

Mamedov E., Nasibova N., SEZER Y.

Azerbaijan Journal of Mathematics, vol.14, no.2, pp.189-204, 2024 (ESCI)

IV.   **Solvability of Riemann Boundary Value Problems and Applications to Approximative Properties of Perturbed Exponential System in Orlicz Spaces**

Bilalov B. T., SEZER Y., Alizadeh F. A., Ildiz U.

Azerbaijan Journal of Mathematics, vol.14, no.1, pp.164-185, 2024 (ESCI)

V.   **On the basicity of one trigonometric system in Orlicz spaces**

Bilalov B., SEZER Y., Ildiz U., Hagverdi T.

Transactions Issue Mathematics, Azerbaijan National Academy of Sciences, vol.44, no.1, pp.31-40, 2024 (Scopus)

VI.   **TRACE REGULARIZATION PROBLEM FOR HIGHER ORDERDIFFERENTIAL OPERATOR**

Sezer Y., Bakşi Ö., Karayel S.

Maltepe Journal of Mathematics, vol.2, no.1, pp.27-37, 2020 (Peer-Reviewed Journal)

VII.   **The sum of subtraction of the eigenvalues of two self adjoint differential operators with unbounded operator coefficient**

BAKŞİ Ö., SEZER Y., KARAYEL S.

INTERNATIONAL JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.3, no.63, pp.255-268, 2010 (Scopus)

VIII.   **The sum of subtraction of the eigenvalues of two self-adjoint differential operators with unbounded operator coefficient**

Karayel S., Bakşi Ö., Sezer Y.

International Journal of Pure and Applied Mathematics, vol.3, no.63, pp.255-268, 2010 (Peer-Reviewed Journal)

IX.   **On Spektrum of a Self Adjoint Differential Operator of Higher Order with Unbounded Operator Coefficient and Asymptotic Behaviour of Eigenvalues**

Adıguzelov E., Sezer Y.

Papers Published in Refereed Scientific Meetings

I. **Trace Regularization Problem for a Fourth Order Differential Operator on Separable Banach Space**
Bakşi Ö., Sezer Y., Kızılbudak Çalışkan S.
ICOMAA 2024 7th International HYBRID Conference on Mathematical Advances and Applications, İstanbul, Turkey, 8 - 11 May 2024, pp.148

II. **Time-Ordered Hyperbolic Evolution Systems**
Bakşi Ö., Gül E., Kızılbudak Çalışkan S., Sezer Y., Karayel S., Hansen A. K., Gill T. L.
2nd International Workshop: Constructive Mathematical Analysis, Konya, Turkey, 6 - 08 July 2023, pp.10

III. **SOLUTION OF FRACTIONAL DİFFERENTİAL EQUATION WITH SHEHU TRANSFORM**
SEZER Y., Bağlık B.
9th International Congress on Fundamental and Applied Sciences 2022 (ICFAS2022), İstanbul, Turkey, 28 June 2022, pp.170

IV. **APPLICATION OF ADOMIAN DECOMPOSITION METHOD AND DIFFERENTIAL TRANSFORMATION METHOD IN SOLVING BAGLEY-TORVIK EQUATION**
SEZER Y., Ertürk M.
9th International Congress on Fundamental and Applied Sciences 2022 (ICFAS2022), İstanbul, Turkey, 28 June 2022, pp.169

V. **Using Big Data in Decision Making Processes and Mathematical Modelling**
Sezer Y., Akdaş B.
5th INTERNATIONAL E-CONFERENCE ON MATHEMATICAL ADVANCES AND APPLICATIONS, İstanbul, Turkey, 11 May 2022, pp.45

VI. **The Second Regularized Trace of Even Order Differential Operators with Operator Coefficient**
SEZER Y., BAKŞİ Ö.
FOURTH INTERNATIONAL CONFERENCE OF MATHEMATICAL SCIENCES, İstanbul, Turkey, 17 June 2020, vol.1, pp.39

VII. **About Second Regularized Trace Of A Differential Operator**
Sezer Y.
European Women in Mathematics General Meeting 2018, Graz, Austria, 3 - 07 September 2018, pp.1

VIII. **On Trace Of Second Order Differential Operator Equation**
Sezer Y.
4th International Conference on Pure and Applied sciences:Renewable Energy, İstanbul, Turkey, 23 - 25 November 2017

IX. **On Regularization of The Trace Of The Differential Operator**
SEZER Y.
Third International Conference On Pure And Applied Science Dubai, 2 - 06 February 2017

X. **About The Regularized Trace of A Self Adjoint Differential Operator**
SEZER Y.
The Eight Congress of Romain Mathematics, 26 June - 01 July 2015

XI. **On the Asymptotic Behavior of Eigenvalues of yhe Sturm- Liouville Operator**
Sezer Y.
The 10 th AIMS Conference on Dynamical Systems, Madrid, Spain, 7 - 11 July 2014, pp.503

XII. **On The Regularized Trace of an Even Order Differential Operator Given in a Finite Interval**
Sezer Y.
Operator Theory, Analysis and Mathematical Physics, Centre De Rcerca Matematica, Barcelona, Spain, 12 - 14 June 2012, pp.1

XIII. **The Regularized Trace Formula For a Differential Operator of Fourth order with bounded operator Coefficient**
SEZER Y., BAKŞİ Ö., KARAYEL S.
International Conference on Mathematical Sciences, Bolu, Turkey, 23 - 27 November 2010

XIV. **The Asymptotic Formula for the Subtraction of eigenvalues of a second order Differential operator**
Bakşi Ö., Karayel S., Sezer Y.
International Symposium on Analysis and theory of Functions, İstanbul Kültür University, İstanbul, Turkey, 24 - 26 August

2009, pp.41-42
XV. **The Second Regularized Trace of a Differential Operator with Operator Coefficien**
Sezer Y.
XVI International Congress on Mathematical Physics, Prague, Praha, Czech Republic, 3 - 08 August 2009, vol.50, no.10201, pp.1
XVI. **The Regularized Trace of a Differential Operator of even Order with Operator Coefficient**
Adıguzelov E., Sezer Y.
Fifth International Conference of Applied Mathematics and Computing , University of Chemical Technology and Metallurgy, Plovdiv, Bulgaria, 12 - 18 August 2008, pp.11
XVII. **Çift Mertebeden Operatör Katsayılı Bir Diferansiyel Operatörün Spektrumunun İncelenmesi ve Özdeğerleri İçin Asimtotik Formül**
Sezer Y.
19. Ulusal Matematik Sempozyumu, Kütahya, Turkey, 21 - 25 August 2006, pp.1

Supported Projects

BAKŞİ Ö., KIZILBUDAK ÇALIŞKAN S., SEZER Y., Project Supported by Higher Education Institutions, Banach Uzayı Üzerinde Sınırsız Operatör Katsayılı Dördüncü Mertebeden Bir Diferansiyel Operatör için Özdeğer Düzenleme Problemi, 2024 - 2024
GÜL E., KIZILBUDAK ÇALIŞKAN S., SEZER Y., BAKŞİ Ö., KARAYEL S., Project Supported by Higher Education Institutions, Zaman-Sıralı Hiperbolik ve Parabolik Evolüsyon Sistemleri, 2023 - 2024
SEZER Y., BAKŞİ Ö., Project Supported by Higher Education Institutions, Yüksek Mertebeden Diferansiyel Operatörün Banach Uzayı Üzerinde Özdeğerlerinin Toplamı için Asimptotik Formüller, 2023 - 2024

Peer Reviews in Scientific Publications

IĞDIR ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, Other Indexed Journal, March 2019

Scientific Research / Working Group Memberships

Howard-Yıldız Analysıs Research Group, Yildiz Technical University, Türkiye, https://avesis.yildiz.edu.tr/arastirma-grubu/arg, 2021 - Continues

Metrics

Publication: 36
Citation (WoS): 11
Citation (Scopus): 22
H-Index (WoS): 2
H-Index (Scopus): 4

Congress and Symposium Activities

4th International Conference on Pure and Applied sciences:Renewable Energy, Attendee, İstanbul, Turkey, 2017

Non Academic Experience

Yeditepe Üniversitesi, Matematik Öğretim üyesi
Türkiye Medipol Üniversitesi, Öğretim üyesi