

Prof. ESRA KIR ARPAT

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AFK-2605-2022

ScopusID: 56780130000

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 1995 - 1999

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1993 - 1995

Undergraduate, Gazi University, Fen-Edebiyat Fakültesi, Matematik Pr., Turkey 1987 - 1992

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Personal Evolution, Regresyon Terapistliği, Türkiye Eğitim Kurumu, 2022

Personal Evolution, Eğitim Koçluğu, Başkent Üniversitesi, 2021

Education Management and Planning, Yaşam Koçluğu, Başkent Univ, 2019

Dissertations

Doctorate, Bir Diferensiyel Denklem Sistemin Ürettiği Non-selfadjoint Singüler Diferensiyel Operatörün Spektral Analizi, Gazi University, Fen Fakültesi, Matematik Bölümü, 1999

Postgraduate, Non-selfadjoint Singüler Diferensiyel Operatörlerin Spektral Analizi, Ankara University, Fen Bilimleri Enstitüsü, 1995

Research Areas

Mathematics, Functional Analysis

Academic Titles / Tasks

Associate Professor, Gazi University, Fen Fakültesi, Matematik, 2012 - 2017

Assistant Professor, Gazi University, Fen Fakültesi, Matematik, 2002 - 2012

Academic and Administrative Experience

Deputy Head of Department, Gazi University, Fen Fakültesi, Matematik, 2020 - 2022

Courses

Araştırma Projesi-II, Undergraduate, 2019 - 2020

Non-Selfadjoint Difensiyel Operatörlerin Spektral Analiz II , Postgraduate, 2019 - 2020

Diferensiyel Denklemler, Undergraduate, 2020 - 2021

Non-Selfadjoint Diferensiyel Operatörlerin Spektral Analizi-I, Postgraduate, 2020 - 2021

Analiz-I, Undergraduate, 2020 - 2021

Analiz II, Undergraduate, 2019 - 2020

Kompleks Analiz , Undergraduate, 2018 - 2019

Araştırma Projesi-I, Undergraduate, 2019 - 2020

Analiz-III, Undergraduate, 2018 - 2019

Spektral Analiz-II, Undergraduate, 2015 - 2016

Harmonik Analiz-I, Postgraduate, 2015 - 2016

Spektral Analiz-I, Undergraduate, 2016 - 2017

Advising Theses

KIR ARPAT E., Levinson Formula For Dirac System With Boundary Condition, Postgraduate, S.KAYHAN(Student), 2021

KIR ARPAT E., Spectral Properties Of Sturm-Liouville Operators System With Boundary Conditions Depending On The Spectral Parameter, Postgraduate, S.ARIKAN(Student), 2020

KIR ARPAT E., Spectral Theory Of Non-Selfadjoint Sturm-Liouville Operator With Operator Coefficient, Doctorate, G.Mutlu(Student), 2018

KIR ARPAT E., Spectral Properties Of A System Of Sturm-Liouville Difference Operators, Postgraduate, B.Yüksel(Student), 2017

KIR ARPAT E., Sturm Liouville fark operatörler sisteminin spektral özellikleri, Postgraduate, B.YÜKSEL(Student), 2017

KIR ARPAT E., Sonlu zaman skaları üzerinde genel sınır koşullu 2. mertebeden lineer dinamik denklemin ürettiği operatörün spektral özellikleri, Postgraduate, N.SESLİ(Student), 2016

KIR ARPAT E., The Spectral Properties Of The Operator Generated By The Second Order Linear Dynamic Equation With General Boundary Condition On A Finite Time Scale, Postgraduate, N.Sesli(Student), 2016

KIR ARPAT E., Spectral properties of schrodinger equation with a general boundary conditions on finite time scale, Postgraduate, H.TERZİ(Student), 2014

KIR ARPAT E., Kompleks potansiyelli Klein-Gordon denkleminin spektral özellikleri, Postgraduate, E.YEŞİLTEPELER(Student), 2007

KIR ARPAT E., Sınır koşullu Schrödinger operatörünün spektrumu ve esas fonksiyonları, Postgraduate, E.SOYLU(Student), 2006

KIR ARPAT E., Genel sınır koşullu kuadratik Schrödinger operatörünün spektrumu ve spektral özellikleri, Postgraduate, P.İŞIK(Student), 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Spectral properties of the finite system of Klein-Gordon s-wave equations with general boundary condition

- Kir Arpat E., Yokus N., Coşkun N.
FILOMAT, no.37, pp.1907-1914, 2023 (SCI-Expanded)
- II. Continuity of the scattering function and Levinson type formula for Klein-Gordon s-wave equation with boundary condition depends on spectral parameter**
Kir Arpat E., Köprübaşı T.
FILOMAT, vol.37, no.20, pp.1225-1233, 2023 (SCI-Expanded)
- III. Spectral properties of non-selfadjoint Sturm-Liouville operator equation on the real axis**
MUTLU G., KIR ARPAT E.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.5, pp.1686-1694, 2020 (SCI-Expanded)
- IV. Spectral properties of non-selfadjoint Sturm Liouville operator with operator coefficient**
Bairamov E., Arpat E., MUTLU G.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.456, no.1, pp.293-306, 2017 (SCI-Expanded)
- V. On the structure of discrete spectrum of a non-selfadjoint system of differential equations with integral boundary condition**
YARDIMCI Ş., KIR ARPAT E., Can C.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.55, no.5, pp.1202-1212, 2017 (SCI-Expanded)
- VI. Spectral properties of Sturm-Liouville system with eigenvalue-dependent boundary conditions**
Kir Arpat E., Mutlu G.
INTERNATIONAL JOURNAL OF MATHEMATICS, vol.26, no.10, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. Uniqueness of the solution to the inverse problem of scattering theory for spectral parameter polynomially dependent Klein-Gordon s-wave equation**
KIR ARPAT E., YOKUS N.
ADVANCED STUDIES-EURO-TBILISI MATHEMATICAL JOURNAL, vol.16, no.1, pp.129-140, 2023 (ESCI)
- II. Uniqueness of the solution to the inverse problem of scattering theory for spectral parameter polynomially dependent Klein-Gordon s-wave equation**
KIR ARPAT E., YOKUŞ N.
Euro-Tbilisi Mathematical Journal, vol.15, no.4, 2023 (Scopus)
- III. UNIQUENESS OF THE SOLUTION TO THE INVERSE PROBLEM OF SCATTERING THEORY FOR SPECTRAL PARAMETER DEPENDENT KLEIN-GORDON S-WAVE EQUATION**
KIR ARPAT E., KÖPRÜBAŞI T.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.72, 2023 (Scopus)
- IV. Spectral Analysis of Non-selfadjoint Second Order Difference Equation with Operator Coefficient**
MUTLU G., KIR ARPAT E.
Sakarya University Journal of Science, vol.24, no.3, pp.501-507, 2020 (Peer-Reviewed Journal)
- V. Spectral expansion of Sturm-Liouville problems with eigenvalue-dependent boundary conditions**
Kir Arpat E., Yokus N.
Communications Faculty of Sciences University of Ankara Series A1 Mathematics and Statistics, vol.68, no.2, pp.1316-1334, 2019 (Peer-Reviewed Journal)
- VI. SPECTRAL EXPANSION OF STURM-LIOUVILLE PROBLEMS WITH EIGENVALUE-DEPENDENT BOUNDARY CONDITIONS**
YOKUŞ N., KIR ARPAT E.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.2, pp.1316-1334, 2019 (ESCI)
- VII. Spectral properties Scrödinger operator with a general boundary conditions of finite time scales**
Kir Arpat E.
Gazi University Journal of Science, vol.29, no.2, pp.467-472, 2016 (Scopus)

- VIII. **Uniqueness of the solution to the inverse solution of scattering theory for the Sturm-Liouville operator system with a spectral parameter in the boundary condition**
 Kir Arpat E., Tunca G. B.
 Gazi University Journal of Science, vol.29, no.1, pp.135-142, 2016 (Scopus)
- IX. **Spectral Properties of Schrodinger Operator with a General Boundary Conditions on Finite Time Scale**
 KIR ARPAT E., Terzi H.
 GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, no.2, pp.467-472, 2016 (ESCI)
- X. **Uniqueness of the Solution to the Inverse Problem of Scattering Theory for the Sturm-Liouville Operator System with a Spectral Parameter in the Boundary Condition**
 Bascanbaz Tunca G., KIR ARPAT E.
 GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, no.1, pp.135-142, 2016 (ESCI)

Books & Book Chapters

- I. **Limit ve Sürekliklik**
 CENGİZ N., TARAKCI Ö., TOSUN M., KADAKAL M., ŞENGÜL S., KAPLAN A., KIR ARPAT E., AKTAŞ M.
 in: Genel Matematik 1, Sağel, Mustafa Kemal ; Aktaş, Mine , Editor, Pegem Akademi, Ankara, pp.157-185, 2010
- II. **Limit ve Sürekliklik**
 CENGİZ N., TARAKCI Ö., AKTAŞ M., TOSUN M., KADAKAL M., ŞENGÜL S., KAPLAN A., KIR ARPAT E.
 in: Genel Matematik 1 Problem Çözümleri, Sağel, Mustafa Kemal ; Aktaş, Mine , Editor, Pegem Akademi, Ankara, pp.135-149, 2006

Refereed Congress / Symposium Publications in Proceedings

- I. **Spectral Properties of Sturm-Liouville Operators System**
 Kir Arpat E.
 Umbak I. Uluslararası Bilimsel Araştırma Kongresi, Ankara, Turkey, 28 February - 01 March 2020, pp.144-153
- II. **An Eigenfunction Expansion of the Non-Selfadjoint Sturm-Liouville Operator**
 YOKUŞ N., KIR ARPAT E., ÇOŞKUN N.
 7th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2018), KİEV, Ukraine, 28 - 31 August 2018, pp.79
- III. **Spectral Analysis of Non-selfadjoint Sturm-Liouville Operator on the Real Line with Operator Coefficient**
 MUTLU G., BAYRAM E., KIR ARPAT E.
 The 3rd International Conference on Natural Science and Applied Mathematics(ICNSAM 2018), 15 - 18 June 2018
- IV. **Spectral Properties of a Finite System of Sturm-Liouville Difference Operators**
 KIR ARPAT E., yüksəl b.
 IRSYSC 2017 - 3rd International Researchers, Statisticians and YoungStatisticians Congress, 24 - 26 May 2017
- V. **Spectral Properties of Non-selfadjoint Sturm-Liouville Operator with Operator Coefficient**
 BAYRAM E., KIR ARPAT E., MUTLU G.
 INTERNATIONAL WORKSHOP ON MATHEMATICAL METHODS IN ENGINEERING, 27 - 29 April 2017
- VI. **Sonlu Zaman Skalası Üzerinde Genel Sınır Koşullu 2. Mertebeden Lineer Dinamik Denklemin Ürettiği Operatörün Spektral Özellikleri**
 Kir Arpat E.
 14. Matematik Sempozyumu, Niğde, Turkey, 14 - 16 May 2015, pp.67-69
- VII. **An expansion for Schrödinger equation on finite time scale**
 Kir Arpat E., Yokuş N.
 Mathematics Days 2014 – International Mathematics Symposium, Çankırı, Turkey, 11 - 13 June 2014, pp.131

- VIII. **Singüler Potansiyele Sahip Non-Selfadjoint Sturm-Liouville Diferensiyel Operatörün Spektrumu ve Esas Fonksiyonları**
Kir Arpat E.
XX. Ulusal Matematik Sempozyumu, Erzurum, Turkey, 3 - 06 September 2007, pp.42
- IX. **2. Mertebeden Diferensiyel Denklem Sisteminin Ürettiği Singüler Diferensiyel Operatörün Spektral Özellikleri**
Kir Arpat E, Bayram E.
Türk Matematik Derneği XV. Ulusal Matematik Sempozyumu, Mersin, Turkey, 4 - 07 September 2002, pp.45
- X. **Bir Diferensiyel Denklem Sistemin Ürettiği Özeşlenik Olmayan Diferensiyel Operatörün Spektral Özellikleri**
Kir Arpat E.
Doç.Dr. Eyüp Sabri Türker Anısına Matematik Sempozyumu, Sakarya, Turkey, 19 - 20 October 2000, pp.32
- XI. **Spectral Expansion of the Non-Selfadjoint Differential Operator Generated by a System of Differential Equations**
Kir Arpat E.
Workshop on Differential Equations and Its Applications, İstanbul, Turkey, 14 - 16 September 2000, pp.25
- XII. **Principal functions of the non-selfadjoint operator generated by system of differential equations**
Kir Arpat E.
Proceedings of the Second Kızılırmak Science Congress, Kırıkkale, Turkey, 20 - 22 May 1998, pp.41-52

Activities in Scientific Journals

Mathematical Methods in the Applied Sciences, Evaluation Committee Member, 2019 - Continues

Pure and Applied Mathematics Journal , Editor, 2017 - Continues

SCIREA Journal of Mathematics, Editor, 2017 - Continues

Scientific Refereeing

JOURNAL OF INEQUALITIES AND APPLICATIONS, SCI Journal, April 2015

ADVANCES IN DIFFERENCE EQUATIONS, SCI Journal, March 2015

ADVANCES IN DIFFERENCE EQUATIONS, SCI Journal, November 2014

JOURNAL OF INEQUALITIES AND APPLICATIONS, SCI Journal, October 2013

Metrics

Publication: 31

Citation (WoS): 14

Citation (Scopus): 13

H-Index (WoS): 3

H-Index (Scopus): 3

Awards

Mutlu G., Kir Arpat E., Gazi Üniversitesi Bilimsel Yayınları Teşvik Ödülü, Gazi Üniversitesi, June 2021

Mutlu G., Kir Arpat E., Tübitak yayın teşvik ödülü 2, Tübitak, February 2021

Bayram E., Kir Arpat E., Mutlu G., Gazi Üniversitesi Bilimsel Yayınları Teşvik Ödülü, Gazi Üniversitesi, April 2018

Bayram E., Kir Arpat E., Mutlu G., TÜBİTAK Yayın Teşvik Ödülü, Tübitak, March 2018

Kir Arpat E., Mutlu G., TÜBİTAK Yayın Teşvik Ödülü, Tübitak, February 2017

