

Assoc. Prof. SEDEF KARAKILIÇ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AIB-1273-2022

ScopusID: 8650762700

Yoksis Researcher ID: 143963

Education Information

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2000 - 2004

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 1998 - 2000

Undergraduate, Dokuz Eylul University, Fen Ve Edebiyat Fakültesi, Turkey 1994 - 1998

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, On the Perturbation Theory for the Multidimensional Schrödinger Operator, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2004

Postgraduate, Asymptotic Formulas for the Eigenvalues of a Schrödinger Operator, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2000

Research Areas

Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2004 - Continues

Research Assistant, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 1998 - 2004

Academic and Administrative Experience

Deputy Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2023 - Continues

Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2023 - Continues

Fakülte Burs Komisyon Üyesi, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2021 - Continues
Adaptation/Exemption Committee Member, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2020 - Continues
Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2012 - 2015
Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2009 - 2012

Courses

Analysis 1, Undergraduate, 2022 - 2023, 2021 - 2022
Project, Undergraduate, 2021 - 2022, 2019 - 2020
Functional Analysis, Undergraduate, 2021 - 2022
Analysis II., Undergraduate, 2021 - 2022
calculus II, Undergraduate, 2019 - 2020, 2018 - 2019
GERÇEL ANALİZ, Undergraduate, 2019 - 2020, 2018 - 2019
Calculus I, Undergraduate, 2019 - 2020, 2018 - 2019
technical English, Undergraduate, 2018 - 2019
Matematik II, Undergraduate, 2018 - 2019
Complex Calculus, Undergraduate, 2018 - 2019
INTRODUCTION TO FUNCTIONAL ANALYSIS, Undergraduate, 2014 - 2015
PH.D RESEARCH, Doctorate, 2014 - 2015, 2013 - 2014
PH.D. THESIS, Doctorate, 2014 - 2015, 2013 - 2014
M.SC. THESIS, Postgraduate, 2014 - 2015
MEASURE THEORY AND LEBESQUE INTEGRAL, Undergraduate, 2014 - 2015
M.SC. RESEARCH, Postgraduate, 2014 - 2015
REAL ANALYSIS, Postgraduate, 2013 - 2014
Functional Analysis, Postgraduate, 2013 - 2014

Advising Theses

Karakılıç S., Spectral Estimates for Magnetic Schrödinger Operators, Doctorate, S.ÖZCAN(Student), Continues
KARAKILIÇ S., Schrödinger operatörlerinin spektral özellikleri üzerine, Doctorate, S.AKDUMAN(Student), 2017
KARAKILIÇ S., Schrödinger operatörünün perturbasyon teorisi üzerine, Doctorate, D.COŞKAN(Student), 2011
KARAKILIÇ S., Schrödinger operatörünün özdeğerleri üzerine, Postgraduate, D.COŞKAN(Student), 2006

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ege Üniversitesi, June, 2022
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İzmir Yüksek Teknoloji Enstitüsü, December, 2020
Doctorate, Doctorate, Dokuz Eylül Üniversitesi, July, 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Bivariate Bernstein-Kantorovich Operators with a Summability Method and Related GBS Operators**
Ansari K. J., KARAKILIÇ S., ÖZGER F.
FILOMAT, vol.36, no.19, pp.6751-6765, 2022 (SCI-Expanded)
- II. **Eigenvalue Asymptotics for the Schrodinger Operator with a Matrix Potential in a Single Resonance Domain**
KARAKILIÇ S., Akduman S.

FILOMAT, vol.29, no.1, pp.21-38, 2015 (SCI-Expanded)

- III. **High energy asymptotics for eigenvalues of the Schrodinger operator with a matrix potential**
COŞKAN ÖZALP D., KARAKILIÇ S.

MATHEMATICAL COMMUNICATIONS, vol.16, no.2, pp.551-567, 2011 (SCI-Expanded)

- IV. **Asymptotic formulae for the Schrodinger operator with Dirichlet and Neumann boundary conditions**
Karakilic S., Atilgan S., Veliev O.

REPORTS ON MATHEMATICAL PHYSICS, vol.55, no.2, pp.221-239, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Perturbation of the Non-Resonance Eigenvalue of a Polyharmonic Matrix Operator**

KARAKILIÇ S.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.22, no.66, pp.725-733, 2020 (Peer-Reviewed Journal)

- II. **ASYMPTOTIC BEHAVIOUR OF RESONANCE EIGENVALUES OF THE SCHRODINGER OPERATOR WITH A MATRIX POTENTIAL**

KARAKILIÇ S., Akduman S., COŞKAN ÖZALP D.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.69, no.1, pp.486-510, 2020 (ESCI)

- III. **On the Spectral Properties of the Schrodinger Operator with a Matrix Potential**

Didem C., KARAKILIÇ S.

Advance Studies in Contemporary Mathematics, vol.19, no.2, pp.249-259, 2009 (Peer-Reviewed Journal)

- IV. **Asymptotic Formulas for the Resonance Eigenvalues of a Schrodinger Operator**

KARAKILIÇ S., VELİEV O., ATILGAN BÜYÜKAŞIK Ş.

Turkish Journal Of Mathematics, 2005 (Peer-Reviewed Journal)

- V. **Asymptotic Formulas for the Eigenvalues of a Schrodinger Operator**

ATILGAN BÜYÜKAŞIK Ş., KARAKILIÇ S., VELİEV O.

Turkish Journal Of Mathematics, vol.26, no.2, pp.215-227, 2002 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **On the Asymptotic Behaviour of the Unstable Bloch Eigenvalues of a Polyharmonic Matrix Operator**

Karakılıç S., Özcan S., Akduman S.

ICOMAA 2024, İstanbul, Turkey, 8 - 11 May 2024, pp.1

- II. **Non-linear Schrödinger Equation on Discrete Graphs**

Akduman S., Karakılıç S.

European Women in Math. General Meeting 2022, Helsinki, Finland, 22 - 26 August 2022, pp.3

- III. **On The Unstable Eigenvalues Of A Polyharmonic Operator**

Karakılıç S., Akduman S.

5. International Conference on Life and Engineering Sciences, Antalya, Turkey, 19 - 22 May 2022, pp.123

- IV. **On The Spectrum of A Electro-Magnetic Scrodinger Operator**

Karakılıç S.

5. International Conference on Life and Engineering Sciences, Antalya, Turkey, 19 - 22 May 2022, pp.122

- V. **On the Eigenvalues of a Polyharmonic Matrix Operator Near Diffraction Planes**

KARAKILIÇ S., Akduman S.

7th International Conference on New Trends in the Applications of Differential Equations in Sciences (NTADES), St Constantin and Helena, Bulgaria, 1 - 04 September 2020, vol.2321

- VI. **Asymptotic Behaviour of Resonance Eigenvalues of the Schrödinger Operator with a Matrix Potential**

AKDUMAN S., COŞKAN D., KARAKILIÇ S.

International Conference on Mathematics and Mechanics, 27 - 28 April 2015

VII. **Eigenvalue Asymptotics for the Schrödinger Operator with a Matrix Potential in a Single Resonance Domain**

KARAKILIÇ S., AKDUMAN S.

Analysis, Topology and Applications-ATA2014, Serbia, 25 - 29 May 2014

VIII. **On the Eigenvalues of a Schrödinger Operator with Matrix Potential**

Didem C., KARAKILIÇ S.

THE 20TH INTERNATIONAL CONGRESS OF JANGJEON MATHEMATICAL SOCIETY, Bursa, 21 - 23 August 2008

IX. **Asymptotic Formulas for the Eigenvalues of Multidimensional Schrodinger Operator**

ATILGAN BÜYÜKAŞIK Ş., KARAKILIÇ S., VELİEV O.

OTAMP; Operator Theory and Applications in Mathematical Physics, Bedlewo Mathematical Conference Center, Poland, 6 - 11 July 2004

X. **Asymptotic Formulas for the Eigenvalues of a Schrodinger Operator**

KARAKILIÇ S.

XIV. Ulusal Matematik Sempozyumu, Anadolu Universitesi, Eskişehir, Turkey, 19 - 21 September 2001

Supported Projects

KARAKILIÇ S., Project Supported by Higher Education Institutions, On the perturbation theory for a schrödinger operator with matrix potential, 2007 - 2010

Karakılıç S., Duman M., Project Supported by Higher Education Institutions, On the perturbation theory for the multidimensional Schrödinger operator, 2003 - 2006

Tasks In Event Organizations

Gergün S., Karakılıç S., GÜLLÜSAÇ M., İzmir Matematik Günleri III, Workshop Organization, İzmir, Turkey, Ekim 2020

Metrics

Publication: 19

Citation (WoS): 6

Citation (Scopus): 6

H-Index (WoS): 1

H-Index (Scopus): 1