

Assoc. Prof. Fatma Hıra

Personal Information

Office Phone: [+90 362 312 1919](tel:+903623121919) Extension: 5038

Email: fatma.hıra@omu.edu.tr

Web: <https://avesis.omu.edu.tr/fatma.hıra>

International Researcher IDs

ScholarID: oqYpUpcAAAAJ

ORCID: 0000-0003-0724-0704

Publons / Web Of Science ResearcherID: GDR-2883-2022

ScopusID: 55577853600

Yoksis Researcher ID: 48728

Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2009 - 2015

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2007 - 2009

Undergraduate, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2002 - 2006

Dissertations

Doctorate, Hareketli süreksizlik noktalı Sturm-Liouville problemi, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2015

Postgraduate, Birleştirilmiş geçiş şartlı süreksiz sınır değer probleminin özdeğer ve özfonksiyonlarının asimptotik açılımları, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2009

Research Areas

Mathematics

Academic Titles / Tasks

Associate Professor, Ondokuz Mayıs University, Fen Fakültesi, Matematik Bölümü, 2021 - Continues

Assistant Professor, Ondokuz Mayıs University, Fen Fakültesi, Matematik Bölümü, 2019 - 2021

Research Assistant, Hitit University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2009 - 2019

Academic and Administrative Experience

Deputy Head of Department, Ondokuz Mayıs University, Fen Fakültesi, Matematik Bölümü, 2022 - Continues

Courses

Sturm-Liouville Operatörler I, Doctorate, 2022 - 2023
 Diferansiyel Denklemler I, Postgraduate, 2022 - 2023, 2019 - 2020
 Mühendislik Matematiği I, Undergraduate, 2022 - 2023
 Diferansiyel Denklemler I, Undergraduate, 2022 - 2023
 Diferansiyel Denklemler, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
 Bitirme Çalışması, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
 Mühendislik Matematiği-I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
 Matematik-I, Undergraduate, 2021 - 2022
 (TBMAT103) Matematik-I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
 Diferansiyel Denklemler-II, Undergraduate, 2021 - 2022, 2020 - 2021
 Mühendislik Matematiği-II, Undergraduate, 2021 - 2022, 2020 - 2021
 (TBMAT101) Matematik-I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
 Matematik-II, Undergraduate, 2021 - 2022
 Diferansiyel Denklemler-I, Postgraduate, 2021 - 2022, 2020 - 2021
 Diferansiyel Denklemler-I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
 (MBG) Matematik-I, Undergraduate, 2020 - 2021
 (MBG) Matematik-II, Undergraduate, 2020 - 2021
 (TBMAT104) Matematik-II, Undergraduate, 2020 - 2021
 Diferansiyel Denklemler-II, Postgraduate, 2020 - 2021
 Diferansiyel Denklemler II, Postgraduate, 2019 - 2020
 (TBMAT102) Matematik-II, Undergraduate, 2019 - 2020
 Diferansiyel Denklemler II, Undergraduate, 2019 - 2020
 (TBMAT104) Matematik II, Undergraduate, 2019 - 2020
 Mühendislik Matematiği II, Undergraduate, 2019 - 2020
 Matematik-I, Undergraduate, 2018 - 2019
 Temel Matematik, Undergraduate, 2018 - 2019, 2017 - 2018
 Matematik II, Undergraduate, 2018 - 2019
 Matematik-II, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **On q -differential transform method**
 Hıra F.
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.56, no.32, 2023 (SCI-Expanded)
- II. **Hahn Laplace transform and its applications**
 Hıra F.
 DEMONSTRATIO MATHEMATICA, vol.56, no.1, 2023 (SCI-Expanded)
- III. **Dirac System Associated with Hahn Difference Operator**
 Hıra F.
 BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.43, no.5, pp.3481-3497, 2020 (SCI-Expanded)
- IV. **The regularized trace of Sturm–Liouville problem with discontinuities at two points**
 Hıra F.
 Inverse Problems in Science and Engineering, vol.25, no.6, pp.785-794, 2017 (SCI-Expanded)
- V. **A trace formula for discontinuous eigenvalue problem**
 Hıra F., Altınışık N.
 FILOMAT, vol.31, pp.2425-2431, 2017 (SCI-Expanded)
- VI. **Sampling theory for Sturm-Liouville problem with boundary and transmission conditions containing an eigenparameter**
 Hıra F., Altınışık N.

ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK, vol.66, no.4, pp.1737-1749, 2015 (SCI-Expanded)

VII. **Sturm-Liouville problem with moving discontinuity points**

Hira F., Altınışık N.

BOUNDARY VALUE PROBLEMS, vol.2015, no.237, pp.1-20, 2015 (SCI-Expanded)

VIII. **Sampling theorems for Sturm-Liouville problem with moving discontinuity points**

Hira F., Altınışık N.

BOUNDARY VALUE PROBLEMS, vol.2014, 2014 (SCI-Expanded)

IX. **Dirac System with Discontinuities at Two Points**

Hira F., Altınışık N.

ABSTRACT AND APPLIED ANALYSIS, vol.2014, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. **Regularized trace formula for Sturm-Liouville problem with retarded argument on quadratically eigenparameter-dependent boundary condition**

Hira F., Altınışık N.

Turkish World Mathematical Society Journal of Applied and Engineering Mathematics, vol.12, no.2, pp.516-523, 2022 (ESCI)

II. **Sampling Theorem Associated with Dirac System of the Hahn Difference Operator**

Hira F.

APPLIED MATHEMATICS E-NOTES, vol.20, pp.115-123, 2020 (ESCI)

III. **Sampling theorem associated with q-Dirac system**

HIRA F.

Journal of Mathematical and Computational Science, vol.9, no.2, pp.167-181, 2019 (Peer-Reviewed Journal)

IV. **EIGENVALUES AND EIGENFUNCTIONS OF Q-DIRAC SYSTEM**

HIRA F.

JOURNAL OF SCIENCE AND ARTS, no.4, pp.937-946, 2018 (ESCI)

V. **A trace formula for the Sturm-Liouville type equation with retarded argument**

HIRA F.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.66, no.1, pp.124-132, 2017 (Peer-Reviewed Journal)

VI. **Eigenvalue problem for discontinuous Dirac system with eigenparameter in a transmission condition**

HIRA F., ALTINIŞIK N.

General Mathematics Notes, vol.31, no.1, pp.72-84, 2015 (Peer-Reviewed Journal)

VII. **Eigenvalue problem with moving discontinuity points**

HIRA F., ALTINIŞIK N.

Journal of Advances in Mathematics, vol.9, no.2, pp.2000-2010, 2014 (Peer-Reviewed Journal)

VIII. **Expansion theorems for discontinuous Sturm Liouville problem**

HIRA F., ALTINIŞIK N.

Journal of Mathematical and Computational Science, vol.4, no.2, pp.335-349, 2014 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Sturm Liouville problem with discontinuity conditions at several pointsA**

HIRA F., ALTINIŞIK N.

in: First International Conference on Analysis and Applied Mathematics, Ashyralyev Allaberen, Lukashov Alexey, Editor, American Institute of Physics, New York, pp.126-129, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **Solutions of q-integro-differential equations using q-differential transform method**
Mohammed M., HIRA F.
7th International Conference on Computational Mathematics and Engineering Sciences (CMES-2023), Elazığ, Turkey, 20 - 21 May 2023
- II. **On q,w-convolution and applications**
HIRA F.
8th International Conference on Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM-2022), Mersin, Turkey, 16 June 2022, pp.14-19
- III. **On the first type q,w-Laplace transform**
HIRA F.
ICAENS-22, Konya, Turkey, 10 - 13 March 2022
- IV. **On Integral Representations of q,ω -Gamma and q,ω -Beta Functions**
Yüksel M., HIRA F.
International Congress on Multidisciplinary Natural Sciences (ICOMNAS-2021), Ankara, Turkey, 1 - 02 December 2021
- V. **q-Laplace dönüşümü ve uygulamaları**
HIRA F.
32.Ulusal Matematik Sempozyumu, Samsun, Turkey, 31 August - 03 September 2019
- VI. **Spectral theory of q,w-Dirac system**
HIRA F.
International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM 2018), Trabzon, Turkey, 23 - 27 July 2018
- VII. **Dirac system for Hahn difference operator**
HIRA F.
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018
- VIII. **A trace formula for discontinuous eigenvalue problem**
HIRA F.
International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017
- IX. **A Trace Formula for the Sturm-Liouville Type Equation with Retarded Argument**
HIRA F.
International Workshop on Mathematical Methods in Engineering, Ankara, Turkey, 27 - 29 April 2017
- X. **Sınır ve Geçiş Şartları Özdeğer Parametresi İçeren Sturm Liouville Problemi için Örneklem Teorisi**
HIRA F.
11. Ankara Matematik Günleri, Ankara, Turkey, 26 - 27 May 2016
- XI. **A Boundary Value Transmission Problem with Moving Discontinuity Points**
HIRA F.
Joint DMV and GAMM Annual Meeting, Braunschweig, Germany, 7 - 11 March 2016
- XII. **Eigenvalues and eigenfunctions of Sturm Liouville problem with discontinuous at the neighborhood**
HIRA F., ALTINIŞIK N.
International Conference on Applied Analysis and Mathematical Modeling-ICAAMM 2013, İstanbul, Turkey, 2 - 05 June 2013
- XIII. **Sturm Liouville Problem with Discontinuity Conditions at Several Points**
Hira F., Altınışik N.
1st International Conference on Analysis and Applied Mathematics (ICAAM), Gümüşhane, Turkey, 18 - 21 October 2012, vol.1470, pp.126-129
- XIV. **Birleştirilmiş geçiş şartlı süreksiz sınır değer probleminin özdeğer ve özfonksiyonlarının asimptotik açılımları Kayseri**
HIRA F., ALTINIŞIK N., MUHTAROĞLU O.

Supported Projects

Hıra F., Project Supported by Higher Education Institutions, Hahn Fark Operatörü ile İlgili Laplace Dönüşümü ve Uygulamaları, 2021 - 2022

Hıra F., Project Supported by Higher Education Institutions, Joint Annual Meeting of GAMM and DMV, 2016 - 2016

Hıra F., Project Supported by Higher Education Institutions, Birleştirilmiş Geçis Sartlı Süreksiz Sturm Liouville Probleminin Green Fonksiyonu ve Rezolvent Operatörü, 2011 - 2013

Scientific Refereeing

Journal of Mathematics, Journal Indexed in SCI-E, March 2023

BOLETIM DA SOCIEDADE PARANAENSE DE MATEMATICA, Journal Indexed in ESCI, November 2022

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, September 2022

INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, Journal Indexed in SCI-E, November 2019

INVERSE PROBLEMS IN SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, December 2018