

## Res. Asst. PhD GÖKHAN MUTLU

### Personal Information

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### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2013 - 2018

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 2011 - 2013

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2006 - 2010

### Foreign Languages

English, C2 Mastery

### Dissertations

Doctorate, Operatör Katsayılı Kendine Eş Olmayan Sturm-Liouville Operatörünün Spektral Teorisi, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2018

Postgraduate, Örtü dönüşümleri grupları, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), 2013

### Research Areas

Functional Analysis, Operators

### Academic Titles / Tasks

Research Assistant PhD, Gazi University, Fen Fakültesi, Matematik, 2011 - Continues

### Courses

MATHEMATICS II, Undergraduate, 2020 - 2021

MATHEMATICS I, Undergraduate, 2020 - 2021

Complex Analysis, Undergraduate, 2019 - 2020

MATEMATİK I, Undergraduate, 2019 - 2020

MATEMATİK II, Undergraduate, 2018 - 2019

FARK DENKLEMLERİ, Undergraduate, 2018 - 2019

REEL ANALİZ, Undergraduate, 2018 - 2019

MATHEMATICS I, Undergraduate, 2019 - 2020

MATEMATİK, Undergraduate, 2019 - 2020

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **On the quotient quantum graph with respect to the regular representation**  
Mutlu G.  
Communications on Pure and Applied Analysis, vol.20, no.2, pp.885-902, 2021 (Journal Indexed in SCI Expanded)
- II. **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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Resolvent Operator of the Matrix Schrödinger Equation on the Half-Line with Quasi-selfadjoint Potential**  
Mutlu G.  
Gazi University Journal of Science Part A: Engineering and Innovation, vol.8, no.2, pp.197-207, 2021 (International Refereed University Journal)
- II. **Kompakt Olmayan Yıldız Graf Üzerindeki Selfadjoint Olmayan Schrödinger Operatörünün Spektral Analizi**  
Mutlu G.  
Gazi Üniversitesi Fen Fakültesi Dergisi, vol.2, no.1, pp.1-12, 2021 (National Refereed University Journal)
- III. **Spectral analysis of non-selfadjoint matrix Schrödinger equation on the half-line with general boundary condition at the origin**  
Mutlu G.  
Tbilisi Mathematical Journal, vol.8, pp.227-236, 2021 (Journal Indexed in ESCI)
- IV. **ASSOCIATED FUNCTIONS OF NON-SELFADJOINT STURM-LIOUVILLE OPERATOR WITH OPERATOR COEFFICIENT**  
MUTLU G.  
TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.11, no.1, pp.113-121, 2021 (Journal Indexed in ESCI)
- V. **Spectrum of Discrete Sturm-Liouville Equation with Selfadjoint Operator Coefficients on the Half-line**  
MUTLU G.  
İğdir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 2021 (Refereed Journals of Other Institutions)
- VI. **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 (Refereed Journals of Other Institutions)
- VII. **SPECTRAL PROPERTIES OF THE SECOND ORDER DIFFERENCE EQUATION WITH SELFADJOINT OPERATOR COEFFICIENTS**  
MUTLU G.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.69, no.1, pp.88-96, 2020 (Journal Indexed in ESCI)

## Books & Book Chapters

## I. Bölüm Kuantum Grafları

MUTLU G.

in: Fen Bilimleri ve Matematikte Araştırma ve Değerlendirmeler (Cilt 1), Prof. Dr. Hasan AKGÜL, Prof. Dr. Hasan Hüseyin DOĞAN, Doç. Dr. Mehmet YÜKSEL, Dr. Onur Karaman, Editor, Gece Kitaplığı, Ankara, pp.61-78, 2021

## II. Kuantum Graflara Kısa Bir Giriş

MUTLU G.

in: Fen Bilimleri ve Matematikte Araştırma ve Değerlendirmeler (Cilt 2), Prof. Dr. Hasan AKGÜL, Prof. Dr. Hasan Hüseyin DOĞAN, Doç. Dr. Mehmet YÜKSEL, Dr. Onur Karaman, Editor, Gece Kitaplığı, Ankara, pp.127-144, 2021

## Refereed Congress / Symposium Publications in Proceedings

### I. SPECTRAL ANALYSIS OF NON-SELFADJOINT SCHRÖDINGER OPERATOR ON NON-COMPACT STAR GRAPH

Mutlu G.

3. Ulusal Başkent Disiplinler Arası Bilimsel Çalışmalar Kongresi, Ankara, Turkey, 14 - 15 March 2021, pp.187-188

### II. Spectral Analysis of Non-selfadjoint Matrix Schrödinger Operator on the Half-line with General Boundary Conditions at Origin

MUTLU G.

4th International Conference on Mathematics, İstanbul, Turkey, 27 - 30 October 2020

### III. EIGENVALUES OF THE SELFADJOINT SCHRÖDINGER OPERATOR ON NON-COMPACT STAR GRAPH

MUTLU G.

International Conference on Mathematics and Its Applications in Science and Engineering (ICMASE 2020), Ankara, Turkey, 9 - 10 July 2020

### IV. Non-selfadjoint Sturm-Liouville Operatör Denkleminin Esas Fonksiyonlar

MUTLU G.

14. Ankara Matematik Günleri, Ankara, Turkey, 28 - 29 June 2019

### V. Discrete Spectrum of the Discrete Sturm-Liouville Operator Equation

MUTLU G.

6th International Symposium on Academic Studies in Science, Engineering and Architecture Sciences, Ankara, Turkey, 13 - 15 June 2019

### VI. 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

### VII. 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

## Supported Projects

Mutlu G., Kramar Fijavz M., Nakić I., Mugnolo D., EU Supported Other Project, Mathematical models for interacting dynamics on networks, 2019 - 2023

## Scientific Research / Working Group Memberships

Variational Methods On Graphs And Networks, COST Action CA18232 Mathematical models for interacting dynamics on networks, Belgium, <https://mat-dyn-net.eu/en/working-groups/wg4>, 2021 - Continues

## Citations

Total Citations (WOS):7

h-index (WOS):2