

Assoc. Prof. Erdal GÜL

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## Education Information

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- I. Doctorate, Yıldız Teknik Üniversitesi, Faculty of Arts & Science, Matematik , Turkey 1992 - 1997
- II. Postgraduate, Yıldız Teknik Üniversitesi, Faculty of Arts & Science, Matematik , Turkey 1990 - 1992
- III. Undergraduate, Yıldız Teknik Üniversitesi, Faculty of Arts & Science, Matematik , Turkey 1986 - 1990

## Foreign Languages

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- I. English, B2 Upper Intermediate

## Certificates, Courses and Trainings

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- I. Education Management and Planning, Erasmus Programı, Aarhus University, 2010
- II. Education Management and Planning, Erasmus Programı, Aarhus University, 2009
- III. Education Management and Planning, SUMMER SCHOOL ON MATHEMATICAL CONTROL THEORY, International Centre for Theoretical Physics, ICTP, 2001
- IV. Education Management and Planning, ICTP Mathematics Diploma Project, International Centre for Theoretical Physics, ICTP, 1995

## Dissertations

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- I. Doctorate, Abelyen Olmayan Kompakt Lie Grupları Üzerinde Kontrol Sistemleri, Yıldız Teknik Üniversitesi, Matematik, Matematik, 1997
- II. Postgraduate, İki Boyutlu Manifoldlar, Yıldız Teknik Üniversitesi, Matematik, Matematik, 1992

## Research Areas

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Mathematics, Differential Equations, Differential Geometry, Functional Analysis, General Topology, Geometry, Real Functions, Operators

## Academic Titles / Tasks

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- I. Associate Professor, Yıldız Technical University, Faculty of Arts & Science, Department of Mathematics, 2013 - Continues
- II. Assistant Professor, Yıldız Technical University, Faculty of Arts & Science, Department of Mathematics, 2001 -

2013

- III. Lecturer PhD, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, 1997 - 2001
- IV. Research Assistant, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, 1991 - 1997

## Courses

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- I. Lineer Operatörlere Giriş, Undergraduate, 2020 - 2021
- II. Matematik 2, Undergraduate, 2020 - 2021
- III. Topolojiye Giriş, Undergraduate, 2020 - 2021
- IV. Lineer Operatörler 1, Postgraduate, 2020 - 2021
- V. Pozitif Operatörlere Giriş, Undergraduate, 2020 - 2021
- VI. Diferansiyel Denklemler, Undergraduate, 2019 - 2020
- VII. C\*- Cebirleri, Doctorate, 2020 - 2021
- VIII. Matematik 1, Undergraduate, 2020 - 2021
- IX. Postgraduate, 2019 - 2020
- X. Reel Analiz, Postgraduate, 2018 - 2019
- XI. Lineer Cebir, Undergraduate, 2016 - 2017, 2017 - 2018
- XII. Topoloji, Postgraduate, 2016 - 2017

## Advising Theses

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- I. Gül E., Akyüz S., Makine Öğrenme Problemlerinde İçbükey olmayan Optimizasyon Modellerinin Yakınsaklık Analizi, Doctorate, D.Üçüncü(Student), Continues
- II. GÜL E., Banach Örgülünde Dunford-Pettis Operatörleri, Postgraduate, D.Üçüncü(Student), 2017
- III. Gül E., Dördüncü Mertebeden Sınırlı Operatör Katsayılı Bir Diferansiyel Operatörün İkinci Düzenli İzi, Doctorate, A.Ceyhan(Student), 2017
- IV. GÜL E., Düzgün Uzaylar, Postgraduate, G.Torcu(Student), 2016
- V. GÜL E., Kontrol Edilebilirlik ve Lie Cebirinin Normalizörü Kullanılarak Sistemlerin İncelenmesi, Postgraduate, H.Handan(Student), 2016
- VI. GÜL E., İkinci Mertebeden Lineer Diferansiyel Denklemlerin Seri Çözümleri, Postgraduate, D.Üçüncü(Student), 2016

## Jury Memberships

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- I. Appointment Academic Staff, Appointment Academic Staff, İstanbul Aydın Üniversitesi, November, 2019
- II. Appointment Academic Staff, Appointment Academic Staff, Kırklareli Üniversitesi, July, 2018
- III. Appointment Academic Staff, Yardımcı Doçentlik Jürisi, T.C. Haliç Üniversitesi, July, 2017
- IV. Appointment Academic Staff, Yardımcı Doçentlik Jürisi, T.C. Haliç Üniversitesi, March, 2017

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

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- I. **A second regularized trace formula for a higher order differential operator**  
Gül E.  
Mathematical Methods in the Applied Sciences, vol.44, no.6, pp.5099-5109, 2021 (Journal Indexed in SCI)
- II. **A Second Regularized Trace Formula for a Fourth Order Differential Operator**  
Gül E., Ceyhan A.

Symmetry-Basel, vol.13, no.4, pp.1-17, 2021 (Journal Indexed in SCI Expanded)

III. **On the regularized trace of a second order differential operator**

Gül E.

APPLIED MATHEMATICS AND COMPUTATION, vol.198, pp.471-480, 2008 (Journal Indexed in SCI)

IV. **The trace formula for Sturm-Liouville operator with operator coefficient**

Adiguzelov E., Avci H., Gül E.

JOURNAL OF MATHEMATICAL PHYSICS, vol.42, pp.2611-2624, 2001 (Journal Indexed in SCI)

## Articles Published in Other Journals

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I. **Abel extensions of some classical Tauberian theorems**

Gül E., Albayrak M.

Creative Mathematics and Informatics, vol.28, pp.105-112, 2019 (Refereed Journals of Other Institutions)

II. **ON THE TRACE FORMULA FOR A DIFFERENTIAL OPERATOR OF SECOND ORDER WITH UNBOUNDED OPERATOR COEFFICIENT**

Gül E., Üçüncü D.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.9, no.1, pp.31-38, 2018 (Journal Indexed in ESCI)

III. **TAUBERIAN THEOREMS FOR STATISTICAL CONVERGENCE**

Gül E., Albayrak M.

TAMKANG JOURNAL OF MATHEMATICS, vol.48, pp.321-330, 2017 (Journal Indexed in ESCI)

IV. **On Abel Convergent Series of Functions**

Gül E., Albayrak M.

Journal of Advances in Mathematics, vol.11, pp.5639-5644, 2016 (Refereed Journals of Other Institutions)

V. **A regularized trace formula for a differential operator of second order with unbounded operator coefficients given in a finite interval**

Gül E.

International Journal of Pure and Applied Mathematics, vol.32, no.2, pp.225-244, 2006 (Refereed Journals of Other Institutions)

VI. **The trace formula of a differential operator of fourth order with bounded operator coefficients and two terms**

Gül E.

Turkish Journal of Mathematics, vol.28, no.3, pp.213-254, 2004 (Refereed Journals of Other Institutions)

VII. **Formula for the highly regularized trace of Sturm Liouville operator with unbounded operator coefficients which has singularity**

Albayrak F. İ. , Baykal Ünal O., Gül E.

Turkish Journal Of Mathematics, vol.25, pp.307-322, 2001 (Refereed Journals of Other Institutions)

VIII. **An asymptotic formula for the number of eigenvalues of a differential operator**

Adiguzelov E., Avci H. B. , Gül E.

Proyecciones, vol.20, no.1, pp.65-82, 2001 (Refereed Journals of Other Institutions)

IX. **An application of Gauss-Bonnet Theorem,**

Gül E.

Pro-Mathematica, vol.13, no.25, pp.11-16, 1999 (Refereed Journals of Other Institutions)

X. **Contrability of Linear Systems on Non-Abelian Compact Lie Groups**

Gül E.

Pro Mathematica, vol.12, no.23, pp.17-22, 1998 (Refereed Journals of Other Institutions)

XI. **The Hessian tensor on a hypersurface in Euclidean space and Otsuki's lemma**

Gül E.

Turkish Journal of Mathematics, vol.21, no.3, pp.375-380, 1997 (Refereed Journals of Other Institutions)

## Books & Book Chapters

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- I. **Topolojiye Giriş**  
GÜL E.  
Papatya Yayıncılık, İstanbul, 2018
- II. **Analitik Fonksiyonlar**  
GÜL E.  
in: Kompleks Analiz ve Uygulamaları, Ahmet DERNEK, Editor, Nobel Yayın Dağıtım, Ankara, pp.127-156, 2013

## Refereed Congress / Symposium Publications in Proceedings

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- I. **MAXIMAL MONOTONE OPERATORS IN BANACH SPACES**  
Gül E., Sinen E.  
International Symposium of Scientific Research and Innovative Studies, Balıkesir, Turkey, 22 - 25 February 2021, pp.263-264
- II. **A Second Regularized Trace Formula For A Higher Order Differential Operator**  
Gül E.  
Fourth International Conference of Mathematical Sciences (ICMS 2020), İstanbul, Turkey, 17 - 21 June 2020, pp.29
- III. **Trace Regularization Problem On a Banach Space**  
Gül E.  
Algebraic and Geometric Methods of Analysis, Odesa, Ukraine, 26 - 30 May 2020, pp.23-24
- IV. **The regularized trace on a Banach space**  
Gül E.  
Banach Spaces and Their Applications, Lviv, Ukraine, 26 June - 29 July 2019, pp.41-44
- V. **Optimality Conditions for Sparse Quadratic Optimization Problem**  
ÜÇÜNCÜ D., AKYÜZ S., GÜL E., WEBER G. W.  
International Conference on Engineering Optimization -EngOpt 2018, Lisboa, Portugal, 17 September 2018, pp.766-777
- VI. **Seyrek Kuadratik Optimizasyon Problemi için Optimalite Koşul İncelemesi**  
ÜÇÜNCÜ D., AKYÜZ S., GÜL E., WEBER G. W.  
38. Yöneylem Araştırması Endüstri Mühendisliği Ulusal Kongresi (YAEM-2018), Eskişehir, Turkey, 26 June 2018, pp.14
- VII. **On the second regularized trace formula for a differential operator with unbounded coefficients**  
Gül E.  
Algebraic and geometric methods of analysis, Odesa, Ukraine, 30 May - 04 June 2018
- VIII. **On Abel Convergence**  
GÜL E., ALBAYRAK M.  
International Conference on Mathematical Advances and Applications (ICOMAA-2018), İstanbul, Turkey, 11 May 2018, pp.48
- IX. **On The Trace Formula for a Differential Operator of Second Order with Unbounded Operator Coefficients**  
GÜL E., ÜÇÜNCÜ D.  
13th Algebraic Hyperstructures and its Applications (AHA2017), İstanbul, Turkey, 24 July 2017, vol.1, pp.111
- X. **Dunford-Pettis Operators and Schur Property**  
Gül E., Üçüncü D.  
International Conference on Mathematics and Engineering (ICOME 2017), İstanbul, Turkey, 10 May 2017, pp.116
- XI. **Tauberian Theorems for Statistical Convergence**  
GÜL E., ALBAYRAK M.  
International Conference on Mathematics and Engineering (ICOME 2017), İstanbul, Turkey, 10 May 2017, vol.1,

pp.394

- XII. **On the second regularized trace of a differential operator with bounded operator coefficient**  
Gül E., Ceyhan A.  
International Conference of Applied Sciences, Engineering and Mathematics (ICASEM 2017), Ohrid, Macedonia, 5 - 07 May 2017, vol.1, pp.52
- XIII. **On Regularized Trace of a Differential Operator of Second Order**  
GÜL E., Ucuncu D.  
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722
- XIV. **On Regularized Trace Formula of a Differential Operator with Operator Coefficients Defined on a Finite Interval**  
Gül E.  
The 14th International Conference on Mathematics and its Applications, Timisoara, Romania, 5 - 07 November 2015, pp.11
- XV. **On the regularized trace of a differential operator with operator coefficients**  
Gül E.  
Young Researchers in Mathematics , Edinburgh, Scotland, 17 - 20 June 2013, pp.3
- XVI. **Calculation of the regularized trace of a differential operator with operator coefficients**  
Gül E.  
Operator Theory, Analysis and Mathematical Physics (OTAMP2012) , Barcelona, Spain, 11 - 14 June 2012, pp.1
- XVII. **Sınırsız operatör katsayılı bir diferansiyel operatörün düzenli izi**  
Gül E.  
5. Ankara Matematik Günleri Kongresi, Ankara, Turkey, 3 - 04 June 2010
- XVIII. **Sonlu aralıkta verilmiş sınırlı operatör katsayılı bir diferansiyel operatörün düzenli izi**  
Gül E.  
XX. Ulusal Matematik Sempozyumu, Erzurum, Turkey, 3 - 06 September 2007, pp.25
- XIX. **On regularized trace of a differential operator of second order with unbounded operator coefficients**  
Gül E.  
Fourth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria, 12 - 18 August 2007, pp.19
- XX. **A regularized trace formula for a differential operator of second order with bounded operator coefficients**  
Gül E.  
II. Türk Dünyası Matematik Sempozyumu, Sakarya, Turkey, 4 - 07 July 2007, pp.70
- XXI. **On the regularized trace Formula of a self-adjoint differential operator of fourth order with operator coefficients given in a finite interval**  
Gül E.  
Third International Conference of Applied Mathematics, Plovdiv, Bulgaria, 12 - 18 August 2006, pp.18

## Supported Projects

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- I. GÜL E., Balotu D., Project Supported by Higher Education Institutions, Bergman Uzayında Hankel Operatörleri, 2020 - Continues
- II. GÜL E., TUBITAK Project, Monotonik Homotopi ve Lie Semigruları, 2016 - 2018

## Scientific Refereeing

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- I. Maltepe Journal of Mathematics, Other Indexed Journal, December 2019
- II. Sigma Journal of Engineering and Natural Sciences, National Scientific Refreed Journal, April 2019
- III. Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi , National Scientific Refreed Journal, September 2018
- IV. Sigma Journal of Engineering and Natural Sciences , National Scientific Refreed Journal, February 2018
- V. TURKISH JOURNAL OF MATHEMATICS, SCI Journal, January 2016
- VI. ADVANCES IN DIFFERENCE EQUATIONS, Journal Indexed in SCI-E, October 2015
- VII. Sigma Journal of Engineering and Natural Sciences, National Scientific Refreed Journal, May 2015

## Citations

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- I. Total Citations (WOS): 25
- II. h-index (WOS): 3

## Refereeing Duties

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