

Asst. Prof. MURAT ALTUNBULAK

Personal Information

Email: murat.altunbulak@deu.edu.tr

Web: <https://avesis.deu.edu.tr/murat.altunbulak>

International Researcher IDs

ScholarID: axieTKIAAAAJ

ORCID: 0000-0002-4979-2227

Publons / Web Of Science ResearcherID: P-3189-2019

ScopusID: 24437434200

Yoksis Researcher ID: 50833

Education Information

Doctorate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Matematik (Dr), Turkey
2002 - 2008

Postgraduate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Matematik (YI) (Tezli),
Turkey 2000 - 2002

Undergraduate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 1995 - 2000

Dissertations

Doctorate, The Pauli principle, representation theory, and geometry of flag varieties, Ihsan Dogramaci Bilkent University,
Institute Of Engineering And Natural Sciences, Mathematics, 2008

Postgraduate, Geometry and matrix spectral problems, Ihsan Dogramaci Bilkent University, Institute Of Engineering And
Natural Sciences, Mathematics, 2002

Research Areas

Mathematics

Academic Titles / Tasks

Assistant Professor, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2009 - Continues

Lecturer, Atilim University, Faculty Of Arts And Sciences, Department Of Mathematics, 2008 - 2009

Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2022 - 2024

Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2021 - 2022

Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2015 - 2018

Deputy Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2012 - 2015

Courses

ADVANCED LINEAR ALGEBRA, Postgraduate, 2023 - 2024, 2022 - 2023
CALCULUS II, Undergraduate, 2022 - 2023
M.Sc. Thesis, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2011 - 2012
M.Sc. Research, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2011 - 2012, 2010 - 2011
M.Sc. Seminar, Postgraduate, 2023 - 2024
Matematik 1, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015
Calculus 1, Undergraduate, 2023 - 2024, 2022 - 2023
Project, Undergraduate, 2022 - 2023, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013
Basic Algebraic Structures, Undergraduate, 2020 - 2021, 2015 - 2016, 2014 - 2015, 2013 - 2014
Matematik II, Undergraduate, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2016 - 2017
Calculus I, Undergraduate, 2021 - 2022, 2018 - 2019, 2017 - 2018
Calculus II, Undergraduate, 2018 - 2019, 2017 - 2018
Fundamentals of Mathematics, Undergraduate, 2018 - 2019, 2015 - 2016, 2014 - 2015, 2013 - 2014
Linear Algebra, Undergraduate, 2016 - 2017
Calculus III, Undergraduate, 2017 - 2018, 2013 - 2014
Calculus II, Undergraduate, 2015 - 2016
Analiz 1, Undergraduate, 2016 - 2017
Basic Algebraic Structures, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014
Linear Algebra, Undergraduate, 2015 - 2016
Fundamentals of Mathematics, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014
Invariant Theory, Postgraduate, 2015 - 2016, 2014 - 2015
Calculus I, Undergraduate, 2015 - 2016
Ph.D. Thesis, Doctorate, 2012 - 2013
Complex Analysis, Doctorate, 2012 - 2013
Linear Algebra 2, Undergraduate, 2012 - 2013
Ph.D. Research, Doctorate, 2012 - 2013
Calculus III, Undergraduate, 2013 - 2014
REPRESENTATIONS THEORY, Doctorate, 2013 - 2014, 2012 - 2013
Theory of Functions of Complex Variables, Doctorate, 2011 - 2012
Linear Algebra 2, Undergraduate, 2011 - 2012, 2010 - 2011
Linear Algebra 2, Undergraduate, 2011 - 2012, 2010 - 2011
Complex Calculus, Undergraduate, 2011 - 2012
Linear Algebra 1, Undergraduate, 2012 - 2013
Project, Undergraduate, 2011 - 2012, 2010 - 2011
Lie Groups, Doctorate, 2010 - 2011
Matematik 1, Undergraduate, 2011 - 2012
REAL ANALYSIS, Undergraduate, 2010 - 2011, 2009 - 2010
Linear Algebra 1, Undergraduate, 2011 - 2012, 2010 - 2011
Linear Algebra 1, Undergraduate, 2011 - 2012, 2010 - 2011
Mathematics III, Undergraduate, 2010 - 2011
THEORY OF FUNCTIONS OF A REAL VARIABLE, Postgraduate, 2009 - 2010

Advising Theses

Altunbulak M., Kuiverlerin temsilleri, Postgraduate, Ç.YIRTICI(Student), 2016
Altunbulak M., Simitçi çeşitlemelerin geometrisi, Postgraduate, Ö.UĞURLU(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The number of orientable small covers over a product of simplices**
Altunbulak M., Güçlükan İlhan A.
PROCEEDINGS OF THE JAPAN ACADEMY SERIES A-MATHEMATICAL SCIENCES, vol.95, no.1, pp.1-5, 2019 (SCI-Expanded)
- II. **Generalized Pauli constraints in small atoms**
Schilling C., Altunbulak M., Knecht S., Lopes A., Whitfield J. D., Christandl M., Gross D., Reiher M.
PHYSICAL REVIEW A, vol.97, no.5, 2018 (SCI-Expanded)
- III. **On small covers over a product of simplices**
Altunbulak M., Guclukan Ilhan A.
TURKISH JOURNAL OF MATHEMATICS, vol.42, no.3, pp.1528-1535, 2018 (SCI-Expanded)
- IV. **The Pauli principle revisited**
Altunbulak M., Klyachko A.
COMMUNICATIONS IN MATHEMATICAL PHYSICS, vol.282, no.2, pp.287-322, 2008 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **A New Construction of Binary Linear Constant Weight Codes**
Altunbulak M., Altunbulak Aksu F.
Second International Bilateral Workshop on Science between Dokuz Eylül University and Azerbaijan National Academy of Science, İzmir, Turkey, 18 November 2022, pp.27
- II. **Binary Linear Constant Weight Codes and n-ary Symmetric Difference**
Altunbulak M.
Algebra, Topology and Related Fields, İzmir, Turkey, 22 - 23 September 2022, pp.2
- III. **Simplekslerin Çarpımları Üzerindeki Yönlendirilebilir Dar Örtüler**
Altunbulak M.
33. Ulusal Matematik Sempozyumu, İstanbul, Turkey, 31 August - 03 September 2021, pp.79
- IV. **On Small Covers over a Product of Simplices**
GÜÇLÜKAN İLHAN A., ALTUNBULAK M.
IV. Kadın Matematikçiler Derneği Çalıştayı, Ankara, Turkey, 28 April 2017
- V. **Calculation Of Generalized Pauli Constraints**
Altunbulak M.
The International Workshop on: Reduced Density Matrices in Quantum Physics and Role of Fermionic Exchange Symmetry 2016, Oxford, England, 12 - 15 April 2016
- VI. **On The Calculations Of Moment Polytopes**
Altunbulak M.
Workshop On Groups Algebras and Related Fields, İzmir, Turkey, 4 - 05 January 2016

Tasks In Event Organizations

- Güçlükan İlhan A., Adiyaman M., Gürbüzler S. K., Karpuz B., Özdemir S., Bayrıl D., Öger V., Altunbulak M., Sarıoğlu C. C., Bayrıl Aykut D., 34th National Mathematics Symposium, Scientific Congress, İzmir, Turkey, Eylül 2022
- Canlı K., ALTUNBULAK M., Dokuz Eylül Üniversitesi ile Azerbaycan Milli İlimler Akademisi Arasındaki Birinci Temel Bilim İkili Çalıştayı, Workshop Organization, İzmir, Turkey, Kasım 2021
- Altunbulak M., Karatekin Mathematics Days: Combinatorics, Algebra, Geometry and Interactions, Workshop Organization, Çankırı, Turkey, Haziran 2011

Metrics

Publication: 10

Citation (WoS): 125

Citation (Scopus): 22

H-Index (WoS): 2

H-Index (Scopus): 1

Congress and Symposium Activities

34. Ulusal Matematik Sempozyumu, Session Moderator, İzmir, Turkey, 2022

Invited Talks

The International Workshop on: Reduced Density Matrices in Quantum Physics and Role of Fermionic Exchange Symmetry 2016, Workshop, Department of Physics, University of Oxford, England, April 2016

Non Academic Experience

Dokuz Eylül Üniversitesi Fen Fakültesi(Fen-Edebiyat Fak.) Topoloji Anabilim Dalı