

## **Assoc. Prof. Fatma Güler**

### **Personal Information**

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### **Education Information**

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2009 - 2014

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 2006 - 2009

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

### **Dissertations**

Doctorate, Öklid uzayında geliştirilmiş robot uç hareketi, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2014

Postgraduate, Minkowski uzayında striksiyon scroll'lu regle yüzeyler için bazı karakterizasyonlar, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), 2009

### **Academic Titles / Tasks**

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

Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2015 - 2021

Research Assistant, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), 2011 - 2014

### **Courses**

TBMAT 103.9 Matematik I, Undergraduate, 2020 - 2021

FMA 847 Uzmanlık Alan Dersi, Postgraduate, 2020 - 2021, 2017 - 2018

İST 257 İleri Matematik, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

TBMAT 101 Matematik I, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

MAT 333 Geometri, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

TBMAT 103 Matematik I, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

UFMA 609 Diferansiyel Geometri I, Postgraduate, 2020 - 2021, 2019 - 2020

Mat 490 Bitirme Çalışması, Undergraduate, 2019 - 2020, 2018 - 2019

TBMAT 104 Matematik II, Undergraduate, 2019 - 2020, 2018 - 2019, 2016 - 2017

TBMAT 102 Matematik II, Undergraduate, 2019 - 2020, 2018 - 2019, 2016 - 2017, 2015 - 2016

UFMA 610 Diferansiyel Geometri II, Postgraduate, 2019 - 2020

TBMAT 104.6 Matematik II, Undergraduate, 2019 - 2020, 2016 - 2017

MAT 324 Matrisler Teorisi, Undergraduate, 2019 - 2020, 2018 - 2019

TBMAT 103.6 Matematik I, Undergraduate, 2019 - 2020

FMA 609 Diferansiyel Geometri I, Postgraduate, 2018 - 2019, 2016 - 2017  
FMA 610 Diferansiyel Geometri II, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
FMA 663 Projekatif Geometri, Postgraduate, 2018 - 2019  
MAT 453 Dönüşümler ve Geometriler, Undergraduate, 2017 - 2018, 2016 - 2017  
IST 203 İstatistik İçin İleri Matematik, Undergraduate, 2017 - 2018  
EEM 152 Doğrusal Cebir, Undergraduate, 2016 - 2017  
EEEM 152 Linear Algebra, Undergraduate, 2016 - 2017  
MAT281.1 Lineer Cebir (Harita Müh. Bölümü), Undergraduate, 2016 - 2017, 2015 - 2016  
ETB MAT 101 Calculus I, Undergraduate, 2016 - 2017  
ETB MAT 102 Calculus II, Undergraduate, 2016 - 2017  
BİL 221.1 Doğrusal Cebir ( Bilgisayar Müh. Bölümü), Undergraduate, 2016 - 2017, 2015 - 2016

### **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **Berry phase models and the electromagnetic trajectories of an optical fiber with a geodesic Frenet frame**  
Güler F.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.21, no.3, 2024 (SCI-Expanded)
- II. **A new approach to find the magnetic flux surfaces**  
Güler F., Kasap E., Altnlşlk N.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.21, no.1, 2024 (SCI-Expanded)
- III. **Surface family interpolating a common spherical indicatrix curve**  
Güler F., Bayram E., Kasap E.  
Filomat, vol.38, no.3, pp.821-831, 2024 (SCI-Expanded)
- IV. **Magnetic spherical indicatrices in Minkowski 3-space**  
Güler F., BAYRAM E., Kasap E.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.20, no.11, 2023 (SCI-Expanded)
- V. **Magnetic flux ruled surfaces**  
BAYRAM E., Güler F., Kasap E.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.46, no.5, pp.5989-6001, 2023 (SCI-Expanded)
- VI. **The focal surfaces of offset surface**  
Güler F.  
OPTIK, vol.271, 2022 (SCI-Expanded)
- VII. **Offset Trajectory Planning of Robot End Effector and its Jerk with Curvature Theory**  
Güler F.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, vol.18, no.10, 2021 (SCI-Expanded)
- VIII. **An approach for designing a developable and minimal ruled surfaces using the curvature theory**  
Güler F.  
International Journal of Geometric Methods in Modern Physics, vol.18, no.1, 2021 (SCI-Expanded)
- IX. **The Adjoint Trajectory of Robot end Effector using the Curvature Theory of Ruled Surface**  
Güler F.  
FILOMAT, vol.34, no.12, pp.4061-4069, 2020 (SCI-Expanded)
- X. **Offset surface pencil with a common asymptotic curve**  
Güler F., BAYRAM E., Kasap E.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.15, no.11, 2018 (SCI-Expanded)
- XI. **A path planning method for robot end effector motion using the curvature theory of the ruled surfaces**  
Güler F., Kasap E.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.15, no.3, 2018 (SCI-Expanded)
- XII. **Parametric representation of a surface pencil with a common asymptotic curve**

## Articles Published in Other Journals

- I. SURFACE PENCIL WITH A COMMON TIMELIKE ADJOINT CURVE  
Güler F.  
Palestine Journal of Mathematics, vol.13, no.1, pp.302-309, 2024 (Scopus)
- II. q-Offset and q-Mannheim offset of ruled surface  
KASAP E., GÜLER F.  
Advanced Studies: Euro-Tbilisi Mathematical Journal, 2023 (Peer-Reviewed Journal)
- III. The Ruled Surface Obtained by the Natural Mate Curve  
Güler F.  
BOLETIM SOCIEDADE PARANAENSE DE MATEMATICA, vol.41, 2023 (ESCI)
- IV. Construction of surface pencil with a given spacelike adjoint curve  
Guler F.  
Advanced Studies: Euro-Tbilisi Mathematical Journal, vol.15, no.2, pp.1-11, 2022 (Scopus)
- V. The Quasi Parallel Curve of a Space Curve  
Güler F.  
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.18, no.2, pp.203-206, 2022 (Peer-Reviewed Journal)
- VI. THE PARALLEL TRAJECTORY RULED SURFACES  
Kurt E., Güler F.  
JOURNAL OF SCIENCE AND ARTS, no.2, pp.439-448, 2022 (ESCI)
- VII. AN APPROACH FOR DESIGNING A SURFACE PENCIL THROUGH A GIVEN GEODESIC CURVE  
Şaffak Atalay G., Güler F., BAYRAM E., Kasap E.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.70, no.1, pp.555-568, 2021 (ESCI)
- VIII. Construction of offset surfaces with a given non-null asymptotic curve  
BAYRAM E., GÜLER F.  
FACTA UNIVERSITATIS-SERIES MATHEMATICS AND INFORMATICS, vol.36, no.5, pp.983-993, 2021 (ESCI)
- IX. An approach for designing a surface pencil through a given asymptotic curve  
GÜLER F., ŞAFFAK ATALAY G., BAYRAM E., KASAP E.  
Journal of Applied Mathematics and Computation, 2019 (Peer-Reviewed Journal)
- X. Eğrilik Teorisi Kullanarak Regle Yüzey Tasarlamada Yeni Bir Yaklaşım  
GÜLER F.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.9, no.4, pp.2200-2206, 2019 (Peer-Reviewed Journal)
- XI. THE TIMELIKE RULED SURFACES ACCORDING TO TYPE -2 BISHOP FRAME IN MINKOWSKI 3-SPACE  
Güler F.  
JOURNAL OF SCIENCE AND ARTS, no.2, pp.323-330, 2018 (ESCI)
- XII. Ruled Surfaces according to Rotation Minimizing Frame  
GÜLER F., KASAP E.  
Mathematical Sciences Letters, 2016 (Peer-Reviewed Journal)
- XIII. Structure and characterization of ruled surfaces in Minkowski 3-space  
Güler F., Kasap E.  
JOURNAL OF DYNAMICAL SYSTEMS AND GEOMETRIC THEORIES, vol.14, no.2, pp.155-164, 2016 (ESCI)
- XIV. Translation Surfaces According to Bishop Frame in Euclidean 3-Space,  
GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
J. Math. Comput. Sci., 2014 (Peer-Reviewed Journal)
- XV. Special Partner Curves Derived From Mannheim Partner Curves  
GÜLER F., ŞAFFAK ATALAY G., KASAP E.

- Journal of Selçuk University Natural and Applied Science, vol.3, no.1, pp.1-7, 2014 (Peer-Reviewed Journal)
- XVI. **Ruled surfaces with striction scroll in  $IR^3$  1**  
 GÜLER F., ÇALIŞKAN M.  
 Int. J. Contemp. Math Sciences, 2012 (Peer-Reviewed Journal)
- XVII. **Some Characterizations for the Ruled surfaces with striction Scroll**  
 GÜLER F., ÇALIŞKAN M.  
 Int. J. Contemp. Math Sciences, 2012 (Peer-Reviewed Journal)
- XVIII. **Spacelike Constant Angle Surfaces In Minkowski 3 Space**  
 ŞAFFAK ATALAY G., GÜLER F., KASAP E.  
 J. Math. Comput. Sci., vol.2, no.3, pp.451-461, 2012 (Peer-Reviewed Journal)
- XIX. **Timelike Constant Angle Surfaces In Minkowski 3 Space**  
 GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
 Int. J. Contemp. Math. Sciences, vol.6, no.44, pp.2189-2200, 2011 (Peer-Reviewed Journal)
- XX. **Timelike Constant Angle Surfaces in Minkowski Space  $R^3$  1**  
 GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
 International J. Contemp. Math. Sci., 2011 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Fatma GÜLER Surface pencil with a common timelike adjoint curve**  
 GÜLER F.  
 IFSCOM 2022, Turkey, 16 June 2022
- II. **Ruled surfaces with the q parallel base curve**  
 GÜLER F.  
 IFSCOM 2022, 16 June 2022
- III. **The Ruled Surfaces with the Parallel Base Curve**  
 KURT E., GÜLER F.  
 ICAENS 2021, 01 November 2021
- IV. **3 Boyutlu Minkowski Uzayında Robot Uç Hareketinin Eş Yörüngesi**  
 GÜLER F.  
 ULUSAL MATEMATİK SEMPOZYUMU 2019, Turkey, 31 August - 03 September 2019
- V. **Regle Yüzeylerin Eğrilik Teorisi Yardımıyla Üreteç Çatıdan Elde Edilen Yeni Eğri ve Regle Yüzeyler**  
 GÜLER F., ŞENER Ç. G.  
 ULUSAL MATEMATİK SEMPOZYUMU 2019, Turkey, 31 August - 03 September 2019
- VI. **The Time Like Mannheim B-pair Curves According to Bishop Type-2 in Minkowski 3-space**  
 GÜLER F., KASAP E.  
 International Conference on Computational and Statistical Methods in Applied Sciences, 9 - 11 November 2017
- VII. **THE TIMELIKE MANNHEIM B-PAIR CURVES ACCORDING TO BISHOP TYPE-2 MINKOWSKI 3- SPACE**  
 GÜLER F., KASAP E.  
 COSTAS 2017, 9 - 11 November 2017
- VIII. **THE RULED SURFACES ACCORDİNG TO TYPE -2 BISHOP FRAME IN MINKOWSKI 3-SPACE**  
 GÜLER F.  
 15.ULUSLARARASI GEOMETRİ SEMPOZYUMU, Turkey, 3 - 06 July 2017
- IX. **Curves and Ruled Surfaces obtained from Natural Trihedron using the Curvature Theory of the Ruled Surfaces**  
 GÜLER F., KASAP E.  
 15.ULUSLARARASI GEOMETRİ SEMPOZYUMU, 3 - 06 July 2017
- X. **Curves and Ruled Surfaces Obtained from Natural Trihedron of a Ruled Surface**  
 GÜLER F., KASAP E.  
 15th International Geometry Symposium, 3 - 06 July 2017

- XI. **Ruled Surfaces According to Rotation Minimizing Frame**  
GÜLER F., KASAP E.  
XII. GEOMETRİ SEMPOZYUMU, Turkey, 23 - 26 June 2014
- XII. **An approach for designing a surface pencil through a given asymptotic curve**  
GÜLER F., ŞAFFAK ATALAY G., BAYRAM E., KASAP E.  
Conference on Geometry: Theory and Applications, 8 - 12 June 2015
- XIII. **Parametric representation of a surface pencil with a common asymptotic curve**  
Bayram E., Güler F., Kasap E.  
Conference on Geometry, İstanbul, Turkey, 19 - 23 March 2014
- XIV. **Special Partner Curves Derived from Mannheim Partner Curve**  
GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
X. Geometri Sempozyumu, Turkey, 13 - 16 June 2012
- XV. **Special Partner Curves Derived from Mannheim Partner Curves**  
GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
X. GEOMETRİ SEMPOZYUMU, Turkey, 13 June 2012
- XVI. **Regle Yüzeyin Geliştirilmiş Robot Uç Effector Hareketi**  
GÜLER F., KASAP E.  
IX. GEOMETRİ SEMPOZYUMU, Turkey, 07 June 2011
- XVII. **Minkowski Uzayında Sabit Açılı Spacelike Yüzeyler**  
ŞAFFAK ATALAY G., GÜLER F., KASAP E.  
IX. GEOMETRİ SEMPOZYUMU, Turkey, 07 June 2011
- XVIII.  **$R^3,1$  Minkowski Uzayında Sabit Açılı Spacelike Yüzeyler**  
ŞAFFAK ATALAY G., GÜLER F., KASAP E.  
IX. Geometri Sempozyumu, Turkey, 7 - 10 June 2010
- XIX. **Minkowski Uzayında Sabit Açılı Timelike Yüzeyler**  
GÜLER F., ŞAFFAK ATALAY G., KASAP E.  
5. ANKARA MATEMATİK GÜNLERİ, Turkey, 3 - 06 June 2010
- XX. **Striksiyon Scroll'lu Regle Yüzeyler için Bazı Özellikler**  
ÇALIŞKAN M., GÜLER F.  
5. ANKARA MATEMATİK GÜNLERİ, Turkey, 3 - 06 June 2010
- XXI.  **$R^3,1$  Minkowski Uzayında Sabit Açılı Timelike Yüzeyler**  
ŞAFFAK ATALAY G., GÜLER F., KASAP E.  
5. Ankara Matematik Günleri, Turkey, 3 - 04 June 2010
- XXII. **Some Characterizations for the Ruled Surfaces with Striction Scroll**  
GÜLER F., ÇALIŞKAN M.  
VII. GEOMETRİ SEMPOZYUMU, Turkey, 7 - 10 July 2009
- XXIII. **On the Ruled Surfaces With Striction Scroll**  
GÜLER F., ÇALIŞKAN M.  
VI. GEOMETRİ SEMPOZYUMU, Turkey, 01 July 2008