

Asst. Prof. MELTEM UZUN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-5779-2020

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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Matematik (Dr), Turkey 2014 - 2021

Postgraduate, Yildiz Technical University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2011 - 2014

Undergraduate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 2006 - 2011

Foreign Languages

English, C2 Mastery

Certificates, Courses and Trainings

Education Management and Planning, 21. yy Becerileri Eğitimi, İstanbul Gelişim Üniversitesi, 2021

Education Management and Planning, Eğiticinin Eğitimi Sertifika Programı, Yıldız Teknik Üniversitesi, 2019

Education Management and Planning, Pedagojik Formasyon Sertifika Programı, Dokuz Eylül Üniversitesi, 2011

Dissertations

Doctorate, On solvability of nonlinear coupled wave systems arising in DNA dynamics, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2021

Postgraduate, High order stable difference schemes for multipoint nonlocal boundary value problems for hyperbolic equations, Yildiz Technical University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2014

Research Areas

Mathematics, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, AERONAUTICAL ENGINEERING (ENGLISH), 2021 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2014 - 2021

Research Assistant, Bursa Uludağ University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2013 - 2014

Academic and Administrative Experience

Bölüm Kalite Komisyonu Üyesi, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, AERONAUTICAL ENGINEERING (ENGLISH), 2022 - Continues

Adaptation/Exemption Committee Member, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, AERONAUTICAL ENGINEERING, 2022 - Continues

Courses

MAT219 SAYISAL ANALİZ, Undergraduate, 2022 - 2023

MAT203 DİFERANSİYEL DENKLEMLER, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

MAT218 AYRIK MATEMATİK, Undergraduate, 2022 - 2023

MTH219 NUMERICAL ANALYSIS, Undergraduate, 2022 - 2023

MAT106 MATEMATİK II, Undergraduate, 2022 - 2023, 2021 - 2022

MAT104 LİNEER CEBİR, Undergraduate, 2022 - 2023

MAT207 OLASILIK VE İSTATİSTİK, Undergraduate, 2022 - 2023

MTH106 MATHEMATICS 2, Undergraduate, 2021 - 2022

MAT105 MATEMATİK 1, Undergraduate, 2022 - 2023, 2021 - 2022

MTH105 MATHEMATICS 1, Undergraduate, 2022 - 2023

MAT 123 MATEMATİK 1, Undergraduate, 2021 - 2022

MTH104 LINEAR ALGEBRA, Undergraduate, 2021 - 2022

MAT 101 MATEMATİK 1, Undergraduate, 2021 - 2022

Jury Memberships

Doctoral Examination, Doctoral Examination, Yıldız Teknik Üniversitesi, December, 2023

Doctorate, Doctorate, Yıldız Teknik Üniversitesi, September, 2023

Post Graduate, Post Graduate, Altınbaş Üniversitesi, July, 2023

Doctoral Examination, Doctoral Examination, Yıldız Teknik Üniversitesi, December, 2022

Academic Staff Examination, Academic Staff Examination, İstanbul Gelişim Üniversitesi, April, 2022

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, February, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Weak solvability of the unconditionally stable difference scheme for the coupled sine-gordon system**
YILDIRIM Ö., Uzun M.
Nonlinear Analysis: Modelling and Control, vol.25, no.6, pp.997-1014, 2020 (SCI-Expanded)
- II. **On Fourth-Order Stable Difference Scheme for Hyperbolic Multipoint NBVP**
YILDIRIM Ö., Uzun M.
Numerical Functional Analysis and Optimization, vol.38, no.10, pp.1305-1324, 2017 (SCI-Expanded)
- III. **On the numerical solutions of high order stable difference schemes for the hyperbolic multipoint nonlocal boundary value problems**
Yıldırım Ö., Uzun M.

APPLIED MATHEMATICS AND COMPUTATION, vol.254, pp.210-218, 2015 (SCI-Expanded)

IV. On Third Order Stable Difference Scheme for Hyperbolic Multipoint Nonlocal Boundary Value Problem

YILDIRIM Ö., Uzun M.

Discrete Dynamics in Nature and Society, vol.2015, 2015 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. On the Optical Soliton Solutions to Nonlinear Phenomena Arising in Communication Engineering
UZUN M.

2nd International E-Conference on Mathematical and Statistical Science: A Selcuk Meeting, Konya, Turkey, 05 June 2023

II. A Unified Numerical Method for Solving System of Nonlinear Wave Equations

YILDIRIM Ö., Uzun M.

4th International Conference on Analysis and Applied Mathematics, ICAAM 2018, Mersin, Turkey, 6 - 09 September 2018, vol.351, pp.149-159

III. NUMERICAL ANALYSIS OF THE NONLINEAR WAVE SYSTEMS BY A NOVEL ITERATIVE METHOD

YILDIRIM Ö., UZUN M.

ICFAS 2020, 06 October 2020

IV. On Convergence of Second Order of Accuracy Finite-Difference Scheme for Coupled sine-Gordon Equations

YILDIRIM Ö., UZUN M.

CMMSE'20, ROTA CADIZ, Spain, 3 - 09 July 2020

V. A note on the numerical solution of coupled Klein-Gordon equations

YILDIRIM Ö., Uzun M.

3rd International Conference of Mathematical Sciences, ICMS 2019, İstanbul, Turkey, 4 - 08 September 2019, vol.2183

VI. On unique solvability of nonlinear coupled systems

YILDIRIM Ö., UZUN M.

3rd International Conference of Mathematical Sciences ICMS 2019, İstanbul, Turkey, 04 September 2019

VII. On Weak Solvability of Coupled Systems

YILDIRIM Ö., UZUN M.

3. International Conference on Mathematics: An Istanbul Meeting for World Mathematicians, Turkey, 3 - 05 July 2019

VIII. A COMPOSITE NUMERICAL METHOD ON THE SOLUTION OF COUPLED SINE-GORDON EQUATIONS BASED ON THE FIXED POINT THEORY

YILDIRIM Ö., UZUN M.

Banach Spaces and their Applications, 26 - 29 June 2019

IX. ON GENERALIZED SOLUTIONS OF NONLINEAR SYSTEMS

YILDIRIM Ö., UZUN M.

International Congress on Fundamental and Applied Sciences, 18 - 20 June 2019

X. On the numerical solution of nonlinear system of coupled sine-Gordon equations

YILDIRIM Ö., Uzun M., ALTUN O.

4th International Conference on Analysis and Applied Mathematics, ICAAM 2018, Mersin, Turkey, 6 - 09 September 2018, vol.1997

XI. Numerical solution of hyperbolic equations with nonlocal BVPs

YILDIRIM Ö., UZUN M.

5th International Congress on Fundamental and Applied Sciences ICFAS2018, Üsküp, Macedonia, 18 June 2018

XII. A Note on the Exact Solution Methods for Nonlinear PDEs

YILDIRIM Ö., UZUN M.

International Congress on Fundamental and Applied Sciences, Saraybosna, Bosnia And Herzegovina, 21 - 25 August 2017, pp.78

- XIII. **Unique Solvability Results on Boundary Value Problems for Semilinear Hyperbolic Equations**
YILDIRIM Ö., UZUN M.

International Congress on Fundamental and Applied Sciences, Saraybosna, Bosnia And Herzegovina, 21 - 25 August 2017, pp.78

- XIV. **On the Existence and Uniqueness of Solutions to Nonlinear Wave Equations**
YILDIRIM Ö., UZUN M.

International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017, pp.549-550

- XV. **On the numerical solution of sine Gordon equation**
YILDIRIM Ö., UZUN M.
ICAAM 2016, ALMATY, Kazakhstan, 7 - 10 September 2016

- XVI. **On the analytical solution methods for sine Gordon equation**
YILDIRIM Ö., UZUN M.
ICAAM 2016, ALMATY, Kazakhstan, 7 - 10 September 2016

- XVII. **On stable difference schemes for multipoint NBVP of the hyperbolic type**
YILDIRIM Ö., UZUN M.
ICFAS 2016, İstanbul, Turkey, 22 - 26 August 2016

- XVIII. **On stability of difference schemes for hyperbolic multipoint NBVP with Neumann conditions**
YILDIRIM Ö., Uzun M.
3rd International Conference on Analysis and Applied Mathematics, ICAAM 2016, Almaty, Kazakhstan, 7 - 10 September 2016, vol.1759

- XIX. **On Stability of Fourth Order of Accuracy Difference Scheme for Hyperbolic Multipoint NBVP with Neumann Conditions**
YILDIRIM Ö., UZUN M.
ICMME 2016, Elazığ, Turkey, 12 - 14 May 2016

- XX. **Third order accurate stable difference scheme for the hyperbolic multipoint nbvp with Neumann conditions**
YILDIRIM Ö., UZUN M.
International Conference on Advancements in Mathematical Sciences (AMS Conference), 5 - 07 November 2015, pp.232

- XXI. **On stability of high order difference schemes for hyperbolic multipoint nonlocal boundary value problem**
YILDIRIM Ö., UZUN M.
AMS- EMS- SPM International Meeting 2015, 10 - 13 June 2015

- XXII. **A Note on the Numerical Solution of Multipoint Nonlocal Boundary Value Hyperbolic Problem with Neumann Conditions**
YILDIRIM Ö., UZUN M.
ICAAMM15, 8 - 12 June 2015, pp.200

- XXIII. **On Third Order of Accuracy Stable Difference Scheme for Multipoint NBVP of the Hyperbolic Type**
Yıldırım Ö., Uzun M.
ICAAM 2014, Simkent, Kazakhstan, 11 - 13 September 2014

- XXIV. **On fourth order of accuracy stable difference scheme for multipoint nbvp of the hyperbolic type**
Yıldırım Ö., Uzun M.
ICAAM 2014, Simkent, Kazakhstan, 11 - 13 September 2014

- XXV. **High order of accuracy stable difference schemes for the approximate solution of the multipoint NBVP for the hyperbolic equation**
YILDIRIM Ö., UZUN M.
ICAAM (AIP Conference Proceedings), Shymkent, Kazakhstan, 11 - 13 September 2014

- XXVI. **On a New Subclass of Meromorphic Harmonic Convex Functions**

Uzun M., Bostancı H., Öztürk M.

Geometric Function Theory and Applications 2013 (GFTA 2013), İstanbul, Turkey, 26 - 30 August 2013, pp.24

Supported Projects

Yıldırım Ö., Uzun M., Project Supported by Higher Education Institutions, DNA Dinamiğindeki Problemlerde Kararlılık Analizi (STABILITY ANALYSIS IN PROBLEMS OF DNA DYNAMICS), 2016 - 2021

Scientific Refereeing

INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING : THEORY APPLICATIONS AND PRACTICE, Journal Indexed in SCI-E, July 2023

Tasks In Event Organizations

Uzun M., 7th International Congress on Fundamental and Applied Sciences 2020 (ICFAS2020), Scientific Congress, Turkey, Ekim 2020

Uzun M., 6th International Congress on Fundamental and Applied Sciences 2019 (ICFAS2019), Scientific Congress, Tirane, Albania, Haziran 2019

Uzun M., 5th International Congress on Fundamental and Applied Sciences 2018 (ICFAS2018), Scientific Congress, Skopje, Macedonia, Haziran 2018

Uzun M., 4th International Congress on Fundamental and Applied Sciences 2017 (ICFAS2017), Scientific Congress, Sarajevo, Bosnia And Herzegovina, Ağustos 2017

Uzun M., International Congress on Fundamental and Applied Sciences 2016 (ICFAS2016), Scientific Congress, İstanbul, Turkey, Ağustos 2016