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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 2005 - 2009

Postgraduate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 2003 - 2005

Postgraduate, Dokuz Eylul University, Eğitim Bilimleri Enstitüsü, Turkey 2003 - 2005

Undergraduate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 1999 - 2003

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, Numerical solutions of linear and nonlinear eigenvalue problems using Taylor's decomposition method,
Dokuz Eylul University, Fen Bilimleri Enstitüsü, 2009

Postgraduate, Least squares method for solving differential equations using Bezier control points, Dokuz Eylul
University, Fen Bilimleri Enstitüsü, 2005

Academic Titles / Tasks

Research Assistant, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2006 - 2011

Advising Theses

Adiyaman M., Numerical Solutions of Linear and Nonlinear Eigenvalue Problems Using Residual Method, Doctorate,
A.BELER(Student), 2023

Adiyaman M., Numerical solutions of integro-differential equations, Postgraduate, M.KEMAL(Student), 2023

ADIYAMAN M., Diferensiyel denklemlerin kalıntı metodu kullanımı ile sayısal çözümleri, Doctorate, V.ÖĞER(Student),
2016

ADIYAMAN M., Başlangıç değer problemlerinin doğrusal olmayan sistemleri için kalıntı metodu, Postgraduate,
B.NOYAN(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An improved grey Verhulst model to forecast energy demand in the USA and Turkey**
Demir Atalay S., Çalış G., Adiyaman M.
Proceedings of the Institution of Civil Engineers - Engineering Sustainability, vol.175, no.3, pp.154-164, 2022 (SCI-Expanded)
- II. **High order approach for solving chaotic and hyperchaotic problems**
ADIYAMAN M.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.51, no.1, pp.27-47, 2022 (SCI-Expanded)
- III. **A residual method using Bezier curves for singular nonlinear equations of Lane-Emden type**
ADIYAMAN M., ÖĞER V.
KUWAIT JOURNAL OF SCIENCE, vol.44, no.4, pp.9-18, 2017 (SCI-Expanded)
- IV. **A New Approach for Linear Eigenvalue Problems and Nonlinear Euler Buckling Problem**
ADIYAMAN M., SOMALI Ş.
ABSTRACT AND APPLIED ANALYSIS, 2012 (SCI-Expanded)
- V. **Taylor's Decomposition on Two Points for One-Dimensional Bratu Problem**
ADIYAMAN M., SOMALI Ş.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.26, no.2, pp.412-425, 2010 (SCI-Expanded)
- VI. **Least squares methods for solving singularly perturbed two-point boundary value problems using Bezier control points**
Evrenosoglu M., Somali S.
APPLIED MATHEMATICS LETTERS, vol.21, no.10, pp.1029-1032, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **Numerical Solutions of Nine-Dimensional Lorenz System**
Adiyaman M.
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.24, no.70, pp.213-219, 2022 (Peer-Reviewed Journal)
- II. **Residual Method for Nonlinear System of Initial Value Problems**
ADIYAMAN M., Noyan B.
COMPUTATIONAL METHODS FOR DIFFERENTIAL EQUATIONS, vol.8, no.4, pp.733-744, 2020 (ESCI)
- III. **Operator splitting methods for computation of eigenvalues of regular Sturm-Liouville problems**
GÜZEL İ., ADIYAMAN M., SOMALI Ş.
Surveys in Mathematics and its Applications, vol.14, no.2019, pp.261-275, 2019 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Numerical Solutions of Integro-Differential Equations**
Altınbaş M. K., Adiyaman M.
10th International Congress on Fundamental and Applied Sciences, İstanbul, Turkey, 6 - 08 June 2023, pp.59
- II. **Numerical Solution of Integro-Differential Equations**
Altınbaş M. K., Adiyaman M.
34. Ulusal Matematik Sempozyumu, İzmir, Turkey, 31 August - 03 September 2022, pp.50
- III. **Kalıntı yönteminin adı diferansiyel denklemlere uygulaması**
Adiyaman M., Öger V.
34. Ulusal Matematik Sempozyumu, İzmir, Turkey, 31 August - 03 September 2022, pp.47
- IV. **Düzenli Sturm-Liouville özdeğer problemlerinin geliştirilmiş kalıntı metodu ile sayısal çözümleri**
Beler A., Adiyaman M.

34. Ulusal Matematik Sempozyumu, İzmir, Turkey, 31 August - 03 September 2022, pp.4
- V. **APPLICATION OF RESIDUAL METHOD TO ORDINARY DIFFERENTIAL EQUATIONS**
ADIYAMAN M.
8. INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 12 - 13 March 2022
- VI. **Improved Residual Method for Approximating Bratu Problem**
BELER A., ADIYAMAN M.
Sab-atan 2021: International Conference on Mathematical Sciences and Applications, Baguio City, Philippines, 24 - 26 November 2021
- VII. **A Residual Method Using Bézier Curves for Regular Sturm-Liouville Eigenvalue Problems**
BELER A., ADIYAMAN M.
The 9th International Workshop on Differential Equations and Applications, İstanbul, Turkey, 24 - 26 May 2019
- VIII. **A New Approach for Sensitive Non linearBoundary Value Problems**
ADIYAMAN M., ÖĞER V.
III. Kadın Matematikçiler Derneği Çalıştayı, İzmir, Turkey, 27 - 29 May 2016
- IX. **A Residual Method Using Bézier Curves for Singular Nonlinear Equations of Lane Emden Type**
ADIYAMAN M., ÖĞER V.
International Conference on Recent Advances in Pure and Applied Mathematics, İstanbul, Turkey, 3 - 06 June 2015
- X. **Numerical Solutions of Highly Sensitive Troesch's Problem Using Residual Method**
ADIYAMAN M., ÖĞER V.
International Conference on Recent Advances in Pure and Applied Mathematics, İstanbul, Turkey, 3 - 06 June 2015
- XI. **Numerical solutions of eigenvalue problems**
ADIYAMAN M.
Seminarios Lema, Porto, Portugal, 03 May 2013
- XII. **A new approach for singularly perturbed boundary value problems**
ADIYAMAN M., SOMALI Ş.
Seminer Series in Statistics, Modelling and Computational Applications, Porto, Portugal, 26 April 2013
- XIII. **Numerical instabilities ill conditioned problem and risk**
ADIYAMAN M.
ISEP 6th International Week, Porto, Portugal, 8 - 12 April 2013
- XIV. **Taylor Decomposition on two points for one dimensiomal Bratu problem**
ADIYAMAN M., SOMALI Ş.
Fourth Conference on Numerical Analysis and Applications, LOZENETZ, Bulgaria, 16 - 20 June 2008
- XV. **Least Square method for solving differential equations using bezier control points**
ADIYAMAN M.
Workshop on Numerical Solution of Differential Equations, İzmir, Turkey, 12 May 2006