Prof. YUSUF UÇAR



Personal Information

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Education Information

Doctorate, Inonu University, Fen-Edebiyat Fakültesi, Matematik/Uygulamalı Matematik, Turkey 2005 - 2011
Postgraduate, Inonu University, Fen-Edebiyat Fakültesi, Matematik/Uygulamalı Matematik, Turkey 2003 - 2005
Undergraduate, Karadeniz Technical University, Mühendislik-Mimarlık Fakültesi, Bilgisayar Mühendisliği, Turkey 1993 - 1997

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, B-SPLINE SONLU ELEMAN YÖNTEMLERİ İLE COUPLED DİFERANSİYEL DENKLEMLERİN NÜMERİK ÇÖZÜMLERİ , Inonu University, Fen Bilimleri Enstitüsü, Matematik/Uygulamalı Matematik, 2011
Postgraduate, 1-BOYUTLU BURGERS TİPİ DENKLEMLERİN SONLU FARK ÇÖZÜMLERİ, Inonu University, Fen Bilimleri Enstitüsü, Matematik/Uygulamalı Matematik, 2005

Research Areas

Mathematics, Differential Equations, Numerical Analysis

Academic Titles / Tasks

Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik, 2022 - Continues
Associate Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik, 2017 - 2022
Assistant Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik, 2012 - 2017
Lecturer, Malatya Turgut Özal University, Akçadağ Vocatıonal School, Department Of Computer Technologıes, 1999 -

2012

Academic and Administrative Experience

Yüksekokul Yönetim Kurulu Üyesi, Inonu University, Fen-Edebiyat Fakültesi, Matematik, 2016 - 2018
Inonu University, Akçadağ Meslek Yüksekokulu, 2009 - 2012
Inonu University, Akçadağ Meslek Yüksekokulu, Bilgisayar Teknolojileri Bölümü, 2008 - 2011
Inonu University, Akçadağ Meslek Yüksekokulu, Bilgisayar Teknolojileri Bölümü, 2000 - 2007
Inonu University, Akçadağ Meslek Yüksekokulu, Bilgisayar Teknolojileri Bölümü, 2000 - 2002

Courses

Doctorate, 2021 - 2022
Doctorate, 2021 - 2022
GENEL MATEMATİK I, Undergraduate, 2017 - 2018
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2017 - 2018, 2016 - 2017
GÖRSEL PROGRAMLAMA, Undergraduate, 2017 - 2018, 2016 - 2017
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2017 - 2018, 2016 - 2017
MATEMATİK I, Associate Degree, 2017 - 2018, 2016 - 2017
UYGULAMALI MATEMATİK I, Postgraduate, 2017 - 2018
MATEMATİK II, Associate Degree, 2017 - 2018, 2016 - 2017
SEMBOLİK PROGRAMLAMA, Undergraduate, 2017 - 2018, 2016 - 2017
WEB TASARIMIN TEMELLERİ, Undergraduate, 2017 - 2018, 2016 - 2017
İNTERNET PROGRAMCILIĞI, Undergraduate, 2017 - 2018, 2016 - 2017
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2017 - 2018, 2016 - 2017
NESNE TABANLI PROGRAMLAMA, Undergraduate, 2017 - 2018, 2016 - 2017
NESNE TABANLI PROGRAMLAMA, Undergraduate, 2017-2018
WEB TASARIMIN TEMELLERİ, Undergraduate, 2017-2018
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2017-2018
SEMBOLİK PROGRAMLAMA, Undergraduate, 2017-2018
GENEL MATEMATİK I, Undergraduate, 2017-2018
MATEMATİK II, Associate Degree, 2017-2018
UYGULAMALI MATEMATİK I, Undergraduate Double Major, 2017-2018
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2017-2018
İNTERNET PROGRAMCILIĞI, Undergraduate, 2017-2018
GÖRSEL PROGRAMLAMA, Undergraduate, 2017-2018
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2017-2018
MATEMATİK I, Associate Degree, 2017-2018
MATEMATİK I, Associate Degree, 2016-2017
MATEMATİK II, Associate Degree, 2016-2017
GÖRSEL PROGRAMLAMA, Undergraduate, 2016-2017
İNTERNET PROGRAMCILIĞI, Undergraduate, 2016-2017
NESNE TABANLI PROGRAMLAMA, Undergraduate, 2016-2017
SEMBOLİK PROGRAMLAMA, Undergraduate, 2016-2017
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2016-2017
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2016-2017
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2016-2017
WEB TASARIMIN TEMELLERİ, Undergraduate, 2016-2017
AÇIK KAYNAK İŞLETİM SİSTEMLERİ, Associate Degree, 2015-2016

PROGRAMLAMA TEMELLERİ, Associate Degree, 2015-2016
İNTERNET PROGRAMCILIĞI, Undergraduate, 2015-2016
NESNE TABANLI PROGRAMLAMA-2, Associate Degree, 2015-2016
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2015-2016
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2015-2016
WEB TASARIMIN TEMELLERİ, Undergraduate, 2015-2016
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2015-2016
GÖRSEL PROGRAMLAMA, Undergraduate, 2015-2016
DELPHİ PROGRAMLAMA I, Associate Degree, 2015-2016
DİFERANSİYEL DENKLEMLER, Undergraduate, 2014-2015
NESNE TABANLI PROGRAMLAMA-2, Associate Degree, 2014-2015
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2014-2015
DELPHİ PROGRAMLAMA I, Associate Degree, 2014-2015
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2014-2015
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2014-2015
PROGRAMLAMA TEMELLERİ, Associate Degree, 2014-2015
GÖRSEL PROGRAMLAMA, Undergraduate, 2014-2015
NESNE TABANLI PROGRAMLAMA-2, Associate Degree, 2013-2014
İLERİ PROGRAMLAMA, Undergraduate Double Major, 2013-2014
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ I, Undergraduate, 2013-2014
WEB TASARIMIN TEMELLERİ, Undergraduate, 2013-2014
SONLU FARK YÖNTEMLERİ II, Undergraduate Minor, 2013-2014
VERİ TABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2013-2014
VERİ TABANI VE YÖNETİMİ, Associate Degree, 2013-2014
ALGORİTMA VE PROGRAMLAMAYA GİRİŞ II, Undergraduate, 2013-2014
DELPHİ PROGRAMLAMA I, Associate Degree, 2013-2014
GÖRSEL PROGRAMLAMA, Undergraduate, 2013-2014
PROGRAMLAMA TEMELLERİ, Associate Degree, 2013-2014
SONLU FARK YÖNTEMLERİ I, Undergraduate Minor, 2012-2013
MATEMATİK, Associate Degree, 2012-2013
MESLEKİ MATEMATİK, Associate Degree, 2012-2013

Advising Theses

Kutluay S., Uçar Y., 1-Boyutlu Genelleştirilmiş Rosenau-KdV Denklemi Ve Nümerik Çözümü, Postgraduate, N.SAKAR(Student), 2022
Yağmurlu N. M., Uçar Y., Rosenau-Burgers Denkleminin Nümerik Çözümüne Yeni Bir Yaklaşım, Postgraduate, A.AHMEDOV(Student), 2022
Uçar Y., Yağmurlu N. M., İkili Burgers denkleminin trigonometrik B-spline kollokasyon yöntemi ile nümerik çözümleri, Postgraduate, M.KEREM(Student), 2021
Uçar Y., Burgers tipi denklemlerin trigonometrik B-spline kollokasyon sonlu eleman yöntemiyle nümerik çözümleri, Postgraduate, İ.DİKEN(Student), 2020
Uçar Y., Trigonometrik B-spline kollokasyon sonlu eleman yöntemiyle düzenli uzun dalga (RLW) denkleminin nümerik çözümleri, Postgraduate, H.YILDIRIM(Student), 2020
Uçar Y., Yağmurlu N. M., Operatör splitting B-spline kollokasyon yöntemi ile bazı kısmi türevli diferansiyel denklemlerin çözümleri, Doctorate, İ.ÇELİKKAYA(Student), 2018
UÇAR Y., 2-boyutlu burgers denkleminin sonlu fark yöntemleri ile nümerik çözümleri, Postgraduate, E.KESER(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Numerical solution of the coupled Burgers equation by trigonometric B-spline collocation method**
Uçar Y., Yağmurlu N. M., Yiğit M. K.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.46, no.5, pp.6025-6041, 2023 (SCI-Expanded)

II. **Numerical approximation to the MEW equation for the single solitary wave and different types of interactions of the solitary waves**
Başhan A., Uçar Y., Yağmurlu N. M., Esen A.
JOURNAL OF DIFFERENCE EQUATIONS AND APPLICATIONS, no.28, pp.1-21, 2022 (SCI-Expanded)

III. **An efficient Strang splitting technique combined with the multiquadric-radial basis function for the Burgers' equation**
SEYDAOĞLU M., UÇAR Y., KUTLUAY S.
COMPUTATIONAL & APPLIED MATHEMATICS, vol.40, no.8, 2021 (SCI-Expanded)

IV. **Strang time-splitting technique for the generalised Rosenau-RLW equation**
KUTLUAY S., Karta M., UÇAR Y.
PRAMANA-JOURNAL OF PHYSICS, vol.95, no.3, 2021 (SCI-Expanded)

V. **A new perspective for the numerical solution of the Modified Equal Width wave equation**
BAŞHAN A., YAĞMURLU N. M., UÇAR Y., ESEN A.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.44, no.11, pp.8925-8939, 2021 (SCI-Expanded)

VI. **Numerical solutions of Boussinesq equation using Galerkin finite element method**
UÇAR Y., ESEN A., Karaagac B.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.37, no.2, pp.1612-1630, 2021 (SCI-Expanded)

VII. **Finite difference method combined with differential quadrature method for numerical computation of the modified equal width wave equation**
Bashan A., YAĞMURLU N. M., UÇAR Y., ESEN A.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.37, no.1, pp.690-706, 2021 (SCI-Expanded)

VIII. **Dynamics of modified improved Boussinesq equation via Galerkin Finite Element Method**
Karaagac B., UÇAR Y., ESEN A.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.43, no.17, pp.10204-10220, 2020 (SCI-Expanded)

IX. **Operator splitting for numerical solution of the modified Burgers' equation using finite element method**
UÇAR Y., YAĞMURLU N. M., CELIKKAYA I.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.35, no.2, pp.478-492, 2019 (SCI-Expanded)

X. **OPERATOR SPLITTING FOR NUMERICAL SOLUTIONS OF THE RLW EQUATION**
YAĞMURLU N. M., UÇAR Y., CELIKKAYA I.
JOURNAL OF APPLIED ANALYSIS AND COMPUTATION, vol.8, no.5, pp.1494-1510, 2018 (SCI-Expanded)

XI. **A new perspective for the numerical solutions of the cmKdV equation via modified cubic B-spline differential quadrature method**
Bashan A., YAĞMURLU N. M., UÇAR Y., ESEN A.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.29, no.6, 2018 (SCI-Expanded)

XII. **A new perspective for quintic B-spline based Crank-Nicolson-differential quadrature method algorithm for numerical solutions of the nonlinear Schrodinger equation**
Bashan A., UÇAR Y., YAĞMURLU N. M., ESEN A.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.133, no.1, 2018 (SCI-Expanded)

XIII. **Numerical Solutions of the Improved Boussinesq Equation by the Galerkin Quadratic B-Spline Finite Element Method**
KARAAĞAÇ B., UÇAR Y., ESEN A.
FILOMAT, vol.32, no.16, pp.5573-5583, 2018 (SCI-Expanded)

XIV. **An effective approach to numerical soliton solutions for the Schrodinger equation via modified cubic B-spline differential quadrature method**

BAŞHAN A., YAĞMURLU N. M., UÇAR Y., ESEN A.
CHAOS SOLITONS & FRACTALS, vol.100, pp.45-56, 2017 (SCI-Expanded)

XV. **Numerical Solutions of the Modified Burgers Equation by a Cubic B-spline Collocation Method**
KUTLUAY S., UÇAR Y., YAĞMURLU N. M.
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.39, no.4, pp.1603-1614, 2016 (SCI-Expanded)

XVI. **A Collocation Finite Element Solution for Stefan Problems with Periodic Boundary Conditions**
KARABENLI H., UÇAR Y., AKSAN E. N.
FILOMAT, vol.30, no.3, pp.699-709, 2016 (SCI-Expanded)

XVII. **A new approach on numerical solutions of the Improved Boussinesq type equation using quadratic B-spline Galerkin finite element method**
UÇAR Y., KARAAGAC B., ESEN A.
APPLIED MATHEMATICS AND COMPUTATION, vol.270, pp.148-155, 2015 (SCI-Expanded)

XVIII. **Numerical solutions of the MRLW equation by cubic B-spline Galerkin finite element method**
Karakoc S. B. G., UÇAR Y., YAGMURLU N. M.
KUWAIT JOURNAL OF SCIENCE, vol.42, no.2, pp.141-159, 2015 (SCI-Expanded)

XIX. **Numerical solutions of the coupled Burgers' equation by the Galerkin quadratic B-spline finite element method**
KUTLUAY S., UÇAR Y.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.36, no.17, pp.2403-2415, 2013 (SCI-Expanded)

XX. **Numerical solution of a coupled modified Korteweg-de Vries equation by the Galerkin method using quadratic B-splines**
KUTLUAY S., UÇAR Y.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.90, no.11, pp.2353-2371, 2013 (SCI-Expanded)

XXI. **A Numerical Solution to Fractional Diffusion Equation for Force-Free Case**
TASBOZAN O., ESEN A., YAĞMURLU N. M., UÇAR Y.
ABSTRACT AND APPLIED ANALYSIS, 2013 (SCI-Expanded)

XXII. **A Quadratic B-Spline Galerkin Approach for Solving a Coupled KdV Equation**
KUTLUAY S., UÇAR Y.
MATHEMATICAL MODELLING AND ANALYSIS, vol.18, no.1, pp.103-121, 2013 (SCI-Expanded)

XXIII. **A Galerkin Finite Element Method to Solve Fractional Diffusion and Fractional Diffusion-Wave Equations**
ESEN A., UÇAR Y., Yagmurlu N. M., TASBOZAN O.
MATHEMATICAL MODELLING AND ANALYSIS, vol.18, no.2, pp.260-273, 2013 (SCI-Expanded)

XXIV. **Numerical approximation to a solution of the modified regularized long wave equation using quintic B-splines**
KARAKOÇ S. B. G., YAĞMURLU N. M., UÇAR Y.
BOUNDARY VALUE PROBLEMS, 2013 (SCI-Expanded)

Articles Published in Other Journals

I. **Numerical Investigation of Modified Fornberg Whitham Equation**
YAĞMURLU N. M., YILDIZ E., UÇAR Y., ESEN A.
Mathematical Sciences and Applications E-Notes, vol.9, no.2, pp.81-94, 2021 (Peer-Reviewed Journal)

II. **Higher Order Splitting Method for Numerical Solution OfNonlinear Coupled System Viscous Burger's Equation**
YAĞMURLU N. M., UÇAR Y., ÇELİKKAYA İ.
Konuralp Journal of Mathematics, vol.8, no.2, pp.234-243, 2020 (Peer-Reviewed Journal)

III. **Numerical Solution of Burger's Type Equation Using Finite Element Collocation method with Strang Splitting**

UÇAR Y., YAĞMURLU N. M., ÇELİKKAYA İ.
Mathematical Sciences and Applications E-Notes, vol.8, no.1, pp.29-45, 2020 (Peer-Reviewed Journal)

IV. **Collocation Method for the KdV-Burgers-Kuramoto Equation with Caputo Fractional Derivative**
YAĞMURLU N. M., UÇAR Y., ESEN A.
Fundamentals of Contemporary Mathematical Sciences, vol.1, no.1, pp.1-13, 2020 (Peer-Reviewed Journal)

V. **Numerical Approximation of the Combined KdV-mKdV Equation via the Quintic B-Spline Differential Quadrature Method**
YAĞMURLU N. M., UÇAR Y., BAŞHAN A.
Adıyaman University Journal of Science, vol.9, no.2, pp.386-403, 2019 (Peer-Reviewed Journal)

VI. **A New Perspective on The Numerical Solution for Fractional Klein Gordon Equation**
Karaagac B., UÇAR Y., YAĞMURLU N. M., ESEN A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.22, no.2, pp.443-451, 2019 (ESCI)

VII. **A Finite Element Method to Solve the System of Two-dimensional Burger' Equations**
KUTLUAY S., YAĞMURLU N. M., UÇAR Y., TAŞBOZAN O.
International Journal of Engineering Mathematics Physics, vol.2019, no.1, pp.1-10, 2019 (Peer-Reviewed Journal)

VIII. **NUMERICAL SOLUTIONS AND STABILITY ANALYSIS OF MODIFIED BURGERS EQUATION VIA MODIFIED CUBIC B-SPLINE DIFFERENTIAL QUADRATURE METHODS**
UÇAR Y., YAĞMURLU N. M., Bashan A.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.37, no.1, pp.129-142, 2019 (ESCI)

IX. **NUMERICAL SOLUTIONS FOR THE FOURTH ORDER EXTENDED FISHER-KOLMOGOROV EQUATION WITH HIGH ACCURACY BY DIFFERENTIAL QUADRATURE METHOD**
Bashan A., UÇAR Y., YAĞMURLU N. M., ESEN A.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.9, no.3, pp.273-284, 2018 (ESCI)

X. **Numerical Solutions of the Modified Burgers' Equation by Finite Difference Methods**
Ucar Y., Yagmurlu N. M., Tasbozan O.
JOURNAL OF APPLIED MATHEMATICS STATISTICS AND INFORMATICS, vol.13, no.1, pp.19-30, 2017 (ESCI)

XI. **A Numerical Approach to the Rosenau-KdV equation using Galerkin Cubic Finite Element Method**
UÇAR Y., KARAAGAC B., KUTLUAY S.
INTERNATIONAL JOURNAL OF APPLIED MATHEMATICS & STATISTICS, vol.56, no.3, pp.83-92, 2017 (ESCI)

XII. **A Numerical Solution of the Modified Burgers Equation Using Linearized Finite Difference Methods**
UÇAR Y., YAĞMURLU N. M., GÜLBAHAR S., KOSE E. G.
Proceedings of IAM, vol.5, no.2, pp.184-195, 2016 (Peer-Reviewed Journal)

XIII. **Numerical solution of the complex modified Korteweg-de Vries equation by DQM**
Başhan A., Uçar Y., Yağmurlu N. M., Esen A.
JOURNAL OF PHYSICS: CONFERENCE SERIES, vol.766, no.1, pp.1-6, 2016 (Peer-Reviewed Journal)

XIV. **Numerical Solutions of the Sine-Gordon Equation by Collocation Method**
TASBOZAN O., YAĞMURLU N. M., UÇAR Y., ESEN A.
Sohag J. Math, vol.3, no.1, pp.1-6, 2016 (Peer-Reviewed Journal)

XV. **Numerical Solutions of the Combined KdV MKdV Equation by a quinic B spline Collocation Method**
YAĞMURLU N. M., TAŞBOZAN O., UÇAR Y., ESEN A.
Applied Mathematics& Information Sciences Letters, vol.4, no.1, pp.19-24, 2016 (Peer-Reviewed Journal)

XVI. **A B-spline collocation method for solving fractional diffusion and fractional diffusion-wave equations**
ESEN A., TASBOZAN O., UÇAR Y., YAĞMURLU N. M.
TBILISI MATHEMATICAL JOURNAL, vol.8, no.2, pp.181-193, 2015 (ESCI)

XVII. **Numerical solution of some fractional partial differential equations using collocation finite element method**
UÇAR Y., YAĞMURLU N. M., Tasbozan O., ESEN A.
Progress in Fractional Differentiation and Applications, vol.1, no.3, pp.157-164, 2015 (Scopus)

XVIII. **Solving Fractional Diffusion And Fractional Diffusion Wave Equations By Petrov Galerkin Finiyte Element Method**
ESEN A., UÇAR Y., YAĞMURLU N. M., TAŞBOZAN O.
TWMS J. App. Eng. Math., vol.4, no.2, pp.155-168, 2014 (Peer-Reviewed Journal)

XIX. **The Solution of Advection Diffusion Equation by the Finite Elements Method**
BULUT H., AKTURK T., UÇAR Y.
International Journal of Basic & Applied Sciences IJBAS-IJENS, vol.13, no.1, pp.88-97, 2013 (Peer-Reviewed Journal)

XX. **Different Linearization Techniques for the Numerical Solution of the MEW Equation**
KARAKOÇ S. B. G., UÇAR Y., YAĞMURLU N. M.
Selçuk Journal of Applied Mathematics, vol.13, no.2, pp.43-62, 2012 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Solving 5th Order KdV-Burger-Fisher Equation via Quintic Trigonometric B-spline Collocation Method**
KARAAĞAÇ B., ESEN A., UÇAR Y., YAĞMURLU N. M.
6 th INTERNATIONAL CONFERENCE ON LIFE AND ENGINEERING SCIENCES, Antalya, Turkey, 2 - 05 November 2023

II. **THE COLLOCATION METHOD FOR SIMPLIFIED MODIFED CAMASSA HOLM EQUATION**
KARAAĞAÇ B., UÇAR Y., ESEN A.
BINGOL 1st INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Bingöl, Turkey, 27 - 29 October 2023

III. **A COLLOCATION FINITE ELEMENT SOLUTION FOR THE FRACTIONAL FOKKER-PLANCK PROBLEM**
KARABENLİ H., ESEN A., UÇAR Y.
CMES-2022, Ordu, Turkey, 20 - 22 May 2022

IV. **ON THE NUMERICAL SOLUTIONS OF TIME FRACTIONAL FITZHUGH NAGUMO EQUATION WITH FORCED TERM**
Köse G. E., UÇAR Y., ESEN A.
CMES-2022, Ordu, Turkey, 20 - 22 May 2022

V. **Numerical Solution of the coupled Burgers' equation by Trigonometric B-spline Collocation Method**
UÇAR Y., YAĞMURLU N. M., YİĞİT M. K.
CMES-2021, Van, Turkey, 8 - 10 June 2021

VI. **A new perspective for the numerical solutions of the cmKdV equation via modified cubic B-spline differential quadrature method**
BAŞHAN A., YAĞMURLU N. M., UÇAR Y., ESEN A.
International Congress on Fundamental and Applied Sciences, 18 - 22 June 2018

VII. **A New Perspective for the Numerical Solution for Fractional Klein Gordon Equation**
KARAAĞAÇ B., UÇAR Y., YAĞMURLU N. M., ESEN A.
3rd International Conference On Computational Mathematics and Engineering Sciences, 4 - 06 May 2018

VIII. **Galerkin Finite Element Method For Coupled Klein Gordon Equation in Two Component Systems**
UÇAR Y., KARAAĞAÇ B., YAĞMURLU N. M., ESEN A.
3rd International Conference On Computational Mathematics and Engineering Sciences, 4 - 06 May 2018

IX. **An effective approach to numerical soliton solutions for the Schrödinger equation via modified cubic B-spline differential quadrature method**
BAŞHAN A., YAĞMURLU N. M., UÇAR Y., ESEN A.
Caucasian Mathematics Conference II (CMC II), Van, Turkey, 22 - 24 August 2017

X. **A Quintic B-spline based Crank-Nicolson-Differential Quadrature Method algorithm for numerical solutions of the nonlinear Schrödinger equation**
BAŞHAN A., UÇAR Y., YAĞMURLU N. M., ESEN A.
International Conference on Applied Analysis and Mathematical Modeling, ICAAMM17, İstanbul, Turkey, 3 - 07 July

2017

XI. **A new perspective: Numerical solutions of the modified improved Boussinesq equation using Lumped Galerkin Approach**
KARAAĞAÇ B., UÇAR Y., ESEN A.
International Confer:ence on Applied Analysis and Mathematical Modeling,ICAAMM17, İstanbul, Turkey, 3 - 07 July 2017

XII. **Numerical Approximations of the Combined KdV-mKdV Equation via the Quintic B-spline Differential Quadrature Method**
YAĞMURLU N. M., UÇAR Y., BAŞHAN A.
lnternational Conference on Applied Analysis and Mathematical Modeling,ICAAMM17, İstanbul, Turkey, 3 - 07 July 2017

XIII. **Numerical solutions for the fourth order extended Fisher-Kolmogorov equation with high accuracy by diffrential quadrature method**
BAŞHAN A., UÇAR Y., YAĞMURLU N. M., ESEN A.
International Conference on Applied Analysis and Mathematical Modeling, ICAAMM17, 3 - 07 July 2017

XIV. **Numerical Solution of the Modified Burgers Equatioo using Cubic B-spline Collocation Mtehod with aSplitting Technique**
UÇAR Y., YAĞMURLU N. M., ÇELİKKAYA İ.
International Conferencc on Applied Analysis and Mathematical Modeling, ICAAMM17, İstanbul, Turkey, 3 - 07 July 2017

XV. **A Splitting Technique Based on the Cubic B-Spline Collocation Method for RLW Equation**
YAĞMURLU N. M., UÇAR Y., ÇELİKKAYA İ.
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017

XVI. **Numerical solutions of the improved Boussinesq equation by the Galerkin quadratic B-spline finite element method**
KARAAĞAÇ B., UÇAR Y., ESEN A.
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XVII. **A Numerical Approach to the Rosenau KdV Equation Using Galerkin Cubic Finite Element Method**
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