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PROF.

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAM-8472-2021

ScopusID: 7004269356

Yoksis Researcher ID: 13286

Learning Knowledge

Doctorate
1990 - 1994

Northern Illinois University, Fen Fakültesi, Matematik, United States Of America

Postgraduate
1988 - 1990

Texas Tech University, Fen Fakültesi, Matematik, United States Of America

Undergraduate
1981 - 1985

Ataturk University, Fen Fakültesi, Matematik, Turkey

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

IT, EGİTEN: Eğitimcilerin Eğitimi Enformatik Sertifikası, ODTÜ Enformatik Enstitüsü, 2001

Dissertations

Doctorate, Numerical Analysis of Ginzburg-Landau Models for Superconductivity, Northern Illinois University, Faculty Of Science And Arts, Mathematics, 1994

Postgraduate, Interface Problems in Neutron Transport by a new set of Quadratures, Texas Tech University, Faculty Of Science And Arts, Mathematics, 1990

Academic Titles / Tasks

Professor
2005 - Continues

Karadeniz Technical University, Fen Fakültesi, Matematik

Associate Professor

2000 - 2005

Karadeniz Technical University, Fen Fakültesi, Matematik

Assistant Professor

1995 - 2000

Karadeniz Technical University, Fen Fakültesi, Matematik

Research Assistant

1985 - 1995

Karadeniz Technical University, Fen Fakültesi, Matematik

Published journal articles indexed by SCI, SSCI, and AHCI

- 1. On the numerical stability and transitional stages of time-dependent Ginzburg–Landau model of superconductivity**
COŞKUN E.
Physica A: Statistical Mechanics and its Applications, vol.626, 2023 (SCI-Expanded)
- 2. On the properties of a single vortex solution of Ginzburg–Landau model of superconductivity**
COŞKUN E.
Physica A: Statistical Mechanics and its Applications, vol.568, 2021 (SCI-Expanded)
- 3. A finite differences method for a two-dimensional nonlinear hyperbolic equation in a class of discontinuous functions**
RASULOV M., Coskun E., SINSOYSAL B.
APPLIED MATHEMATICS AND COMPUTATION, vol.140, pp.279-295, 2003 (SCI-Expanded)
- 4. Nucleation of vortices with a temperature and time-dependent Ginzburg-Landau model of superconductivity**
Coskun E., CAKIR Z., TAKAC P.
EUROPEAN JOURNAL OF APPLIED MATHEMATICS, vol.14, pp.111-127, 2003 (SCI-Expanded)
- 5. Computational simulation of flux trapping and vortex pinning in type-II superconductors**
Coskun E.
APPLIED MATHEMATICS AND COMPUTATION, vol.106, no.1, pp.31-49, 1999 (SCI-Expanded)
- 6. An efficient numerical method for solving the Korteweg-de Vries equation in a class of discontinuous functions**
RASULOV M., Coskun E.
APPLIED MATHEMATICS AND COMPUTATION, vol.102, pp.139-154, 1999 (SCI-Expanded)
- 7. Simulating vortex motion in superconducting films with the time-dependent Ginzburg-Landau equations**
Coskun E., KWONG M.
NONLINEARITY, vol.10, no.3, pp.579-593, 1997 (SCI-Expanded)
- 8. On the discrete-ordinates method via case's solution**
GANGULY K., ALLEN E., Coskun E., NIELSEN S.
Journal of Computational Physics, vol.107, no.1, pp.66-83, 1993 (SCI-Expanded)

Articles Published in Other Journals

- 1. Gabor Filter Selection and Computational Processing for Emotion Recognition (studygroup report, joint work)**
Coşkun E.

- The Mathematical Institute, University of Oxford, Eprints Archive, ESGI100, Oxford,UK., pp.1-26, 2014 (Non Peer-Reviewed Journal)
2. **A model for the reduction of specific area of powders with age(studygroup report, joint work)**
Coşkun E. V. A.
The Mathematical Institute, University of Oxford, Eprints Archive, ESGI85, Norwich, UK., pp.1-27, 2012 (Non Peer-Reviewed Journal)
 3. **Initialization Strategy for Nonlinear Systems(Studygroup Report, joint work)**
Coşkun E. V. A.
The Mathematical Institute, University of Oxford, Eprints Archive, 1st KAUST, Thuwal, Saudi Arabia, pp.1-15, 2011 (Non Peer-Reviewed Journal)
 4. **A medical waste sterilizer(Studygroup report, joint work)**
Coşkun E. V. A.
The Mathematical Institute, University of Oxford, Eprints Archive, EM2010, Trabzon, pp.1-14, 2010 (Non Peer-Reviewed Journal)
 5. **Underreamer Mechanics(Studygroup report, joint work)**
Coşkun E. V. A.
The Mathematical Institute, University of Oxford, Eprints Archive, ESGI68, Southampton, UK, pp.1-17, 2009 (Non Peer-Reviewed Journal)
 6. **Cuttings Transport with Drillstring Rotation(Studygroup Report, joint work)**
Coşkun E. V. A.
The Mathematical Institute, University of Oxford, Eprints Archive, ESGI59, Nottingham,UK., pp.1-15, 2007 (Non Peer-Reviewed Journal)
 7. **An effective Algorithm for Euler System in a Class of Discontinuous Functions**
Rasulov M., Coşkun E.
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.4, pp.185-188, 1999 (Peer-Reviewed Journal)
 8. **On some bounds for the solutions of the semi-discretized time-dependent Ginzburg-Landau equations**
Coşkun E.
Turkish Journal of Mathematics, vol.21, no.SUPPL., pp.25-44, 1997 (Scopus)
 9. **Parallel solution of time-dependent Ginzburg-Landau equations and other experiences using Chameleon and BlockComm.**
Coşkun E., Kwong M. K.
Mathematics and Computer Science Division, Technical Report, Argonne National Laboratory, University of Chicago, US., vol.45, pp.1-47, 1995 (Non Peer-Reviewed Journal)

Books & Book Chapters

1. **Maxima ile sembolik hesaplama ve kodlama**
Coşkun E.
KTÜ Yayinevi, Trabzon, 2022
2. **Octave ile sayısal hesaplama ve Kodlama**
Coşkun E.
KTÜ Yayinevi, Trabzon, 2022
3. **MATEMATİK CİLT II - Calculus Early Transcendentals**
BAŞARIR M., ÇELİK S., ÇELİK S., COŞKUN E., EKİNCİOĞLU İ.
Nobel Akademik Yayıncılık, Ankara, 2017

Other Publications

1. **Endüstriyel ve Uygulamalı Matematiğe Giriş**
Coşkun E.
Lecture Note, pp.1-375, 2021
2. **Lineer Kısmi Diferensiyel Denklemlere Giriş**
Coşkun E.
Lecture Note, pp.1-380, 2019
3. **Diferensiyel Denklemler için Sonlu fark Yöntemleri**
COŞKUN E.
Lecture Note, pp.1-200, 2018
4. **MATLAB/Octave Uygulamalı Sayısal Analize Giriş**
COŞKUN E.
Lecture Note, pp.1-350, 2014
5. **Calculus(Early Transcendentals) Dennis G. Zill, Warren S. Wright, Nobel Yayıncılık, Çeviri 13 ve 16. Bölümler**
COŞKUN E.
Other, 2013
6. **Maxima ile Sembolik Hesaplama ve Kodlama**
COŞKUN E.
Other, pp.1-180, 2012
7. **First Euro-Asian Studygroup with Industry, full reports**
COŞKUN E.
Technical Report, pp.1-60, 2010
8. **MATLAB/OCTAVE ile Sayısal Hesaplama ve Kodlama**
COŞKUN E.
Lecture Note, pp.1-174, 2010

Academic and Administrative Experience

2022 - Continues	Head of Department	Karadeniz Technical University, Fen Fakültesi, Matematik
2005 - 2008	Vice Dean	Karadeniz Technical University, Fen-Edebiyat Fakültesi
1999 - 2004	Head of Department	Karadeniz Technical University, Rektörlük, Enformatik Bölümü

Courses

Matematiksel Modelleme, Undergraduate, 2018 - 2019
Sayısal Analiz II, Undergraduate, 2018 - 2019
Mathematical Control Theory, Doctorate, 2018 - 2019
Endüstriyel Matematik, Undergraduate, 2018 - 2019
Sayısal Analiz I, Undergraduate, 2018 - 2019
Diferensiyel Denklemler için Sayısal Yöntemler, Undergraduate, 2018 - 2019
Matematiksel Hesaplama, Undergraduate, 2017 - 2018
Methods of Applied Mathematics, Postgraduate, 2013 - 2014

Advising Theses

COŞKUN E., Kimax: Maxima ile Kimyasal Reaksiyon Kinetik Analiz Paketi, Postgraduate, R.Yaprak(Student), 2017

COŞKUN E., Ağsız eleman bağımsız Galerkin yönteminin optimizasyonu ve adaptif uygulamaları, Doctorate, S.Şengül(Student), 2016

COŞKUN E., Vektör Tabanlı Sıfıryeri ve Ekstremum Nokta Belirleme Algoritmaları, Postgraduate, M.Memoğlu(Student), 2012

COŞKUN E., Silindirik halkasal bölge içerisinde parçacık taşınım modeli ve analizi, Doctorate, İ.Cumhur(Student), 2011

Coşkun E., Verimlilik Esaslı Reaksiyon-Konveksiyon-Difüzyon Nüfus Modeli, Postgraduate, O.Cabri(Student), 2011

COŞKUN E., Black-Scholdes Opsiyon Modeli için Lineer Regresyon Yaklaşımı, Postgraduate, D.Yazır(Student), 2011

COŞKUN E., Ginzburg-Landau Modeli ve Varyasyonları, Doctorate, A.Gökdoğan(Student), 2010

COŞKUN E., Futbol Topu Yörünge Modeli ve Analizi, Postgraduate, S.Şengül(Student), 2010

Coşkun E., Geliştirilmiş Lazer-McKenna asma köprü salınım modelleri, Doctorate, M.Merdan(Student), 2009

COŞKUN E., Sıcaklık ve Zaman Bağımlı Ginzburg-Landau Modeli, Doctorate, Z.Çakır(Student), 2006

COŞKUN E., WebMatris:Web Tabanlı Matris Laboratuvarı, Postgraduate, İ.Cumhur(Student), 2004

COŞKUN E., Diferensiyel Denklemlerin Sayısal Çözümleri için Web Tabanlı İnteraktif Uygulamalar, Postgraduate, A.Gökdoğan(Student), 2004

COŞKUN E., İki boyutlu diferensiyel denklem sistemleri için dallanma analizi, Postgraduate, M.Merdan(Student), 2003

COŞKUN E., Diferensiyel Denklemler için mathematica ile interaktif Uygulamalar, Postgraduate, İ.Özsoy(Student), 2002

COŞKUN E., Maple ile lineer olmayan denklem sistemleri için kararlılık analiz, Postgraduate, Ü.Terzioğlu(Student), 2002

Scientific Refereeing

TUBITAK Project, April 2019

Metrics

Publication: 55
Citation (WoS): 58
Citation (Scopus): 72
H-Index (WoS): 4
H-Index (Scopus): 4

Congress and Symposium Activities

CMES 2022, 6th International conference on computational mathematics and engineering science, Ordu University, Invited Speaker, Ordu, Turkey, 2022

WOPAM 2019, Workshop on Pure and Applied Mathematics, Atatürk University, Invited Speaker, Erzurum, Turkey, 2019

ICAAMM, 2015, International Conference on Applied Analysis and Mathematical Modelling, Yıldız Technical University, Invited Speaker, İstanbul, Turkey, 2015

14. Matematik Sempozyumu, Niğde Üniversitesi, Invited Speaker, Niğde, Turkey, 2015

13. Matematik Sempozyumu, Karabük Üniversitesi, Invited Speaker, Karabük, Turkey, 2014

ESGI100: Avrupa 100. Endüstriyel Matematik Çalıştayı, Oxford University, Attendee, Oxford, England, 2014

11. Matematik Sempozyumu, Ondokuz Mayıs Üniversitesi, Invited Speaker, Samsun, Turkey, 2012

ESGI85: 85. Avrupa Endüstriyel Matematik Çalıştayı, East Anglia University, Attendee, Norwich, England, 2012

10. Matematik Sempozyumu, Işık Üniversitesi, Panelists, İstanbul, Turkey, 2011

Oxford-Kaust Endüstriyel Matematik Çalıştayı, King Abdullah University of Science and Technology, Attendee, Jiddah, Saudi Arabia, 2011

9. Matematik Sempozyumu, Karadeniz Teknik Üniversitesi, Invited Speaker, Trabzon, Turkey, 2010

EM2010 Uluslararası Katılımlı Endüstriyel Matematik Çalıştayı(organizatör), Karadeniz Teknik Üniversitesi, Working Group, Trabzon, Turkey, 2010

ESGI73: 73. Avrupa Endüstriyel Matematik Çalıştayı, University of Warwick , Working Group, Coventry, England, 2010
4. Ulusal Süperiletkenlik Sempozyumu, Karadeniz Teknik Üniversitesi, Invited Speaker, Trabzon, Turkey, 2009
ESGI68: 68. Avrupa Endüstriyel Matematik Çalıştayı, University of Southampton, Attendee, Southampton, England, 2009
ESGI59: 59. Avrupa Endüstriyel Matematik Çalıştayı, University of Nottingham, Attendee, Nottingham, England, 2007

Invited Talks

Mathematical Methods in Industrial Mathematics: A review from recent case studies, Conference, CMES 2022:6th
International Conference on Computational Mathematics and Engineering Sciences, Ordu, Türkiye, 20 - 22 Mayıs 2022,
ss.22, Turkey, May 2022

Research Areas

Differential Equations, Numerical Analysis