

Prof. MERYEM KAYA

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AIE-4212-2022

ScopusID: 55417963100

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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1989 - 1994

Postgraduate, Gazi University, Fen Fakültesi, Matematik Bölümü, Turkey 1985 - 1988

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 1982 - 1985

Research Areas

Mathematics

Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Matematik, 2019 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Matematik, 2010 - 2019

Assistant Professor, Gazi University, Fen Fakültesi, Matematik, 1998 - 2011

Academic and Administrative Experience

Erasmus Coordinator, Gazi University, Fen Fakültesi, Matematik, 2004 - 2012

Advising Theses

KAYA M., Existence, Uniqueness And Structural Stability Of The Solutions Of A Partial Differential Equation, Postgraduate, A.ATMACA(Student), 2019

KAYA M., Analysis of the properties of the solutions of a thin domain problem under periodic boundary conditions, Doctorate, M.ÖZLÜK(Student), 2017

KAYA M., Global Attractors And Determining Modes For The Navier- Stokes-Voight Equations, Postgraduate, S.GÜÇKIRAN(Student), 2015

KAYA M., The properties and the solution of the Benard Problem, Postgraduate, S.ALAN(Student), 2014

KAYA M., On the solution of the g-navier stokes equations, Postgraduate, Ö.KAZAR(Student), 2013

KAYA M., Bazı akışkan hareketlerini belirleyen denklemler için sınır değer problemlerinin çözülebilirliği, Postgraduate,

B.DOĞANAY(Student), 2010

KAYA M., ON BENJAMIN-BONA-MAHONY EQUATION, Postgraduate, Y.BAŞER(Student), 2010

KAYA M., BAZI AKIŞKAN HAREKETLERİNİ BELİRLEYEN DENKLEMLER İÇİN SINIR DEĞER PROBLEMLERİNİN ÇÖZÜLEBİLİRLİĞİ, Postgraduate, B.DOĞANAY(Student), 2010

KAYA M., Bir türbülanslı akış modelinin varlığı ve tekliği üzerine, Postgraduate, İ.ŞAHİNER(Student), 2008

KAYA M., Navier-Stokes denklemlerinin zayıf çözümlerinin varlığı ve tekliği üzerine, Postgraduate, R.ÇİL(Student), 2007

KAYA M., ON THE EXISTENCE AND UNIQUENESS OF THE WEAK SOLUTION OF THE NAVIER-STOKES EQUATIONS, Postgraduate, R.ÇİL(Student), 2007

KAYA M., ON THE EXISTENCE AND UNIQUENESS OF WEAK SOLUTIONS OF THE MODEL OF A TURBULENCE FLOW, Postgraduate, İ.ŞAHİNER(Student), 2007

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **On the weak and strong solutions of the velocity-vorticity model of the g -Navier-Stokes equations**
Kazar Ö., Kaya M.
TURKISH JOURNAL OF MATHEMATICS, vol.47, pp.1694-1714, 2023 (SCI-Expanded)
- II. **On the Strong Solutions and the Structural Stability of the g -Benard Problem**
Ozluk M., KAYA M.
NUMERICAL FUNCTIONAL ANALYSIS AND OPTIMIZATION, vol.39, no.4, pp.383-397, 2018 (SCI-Expanded)
- III. **On the weak solutions and determining modes of the g -Benard problem**
Ozluk M., KAYA M.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.47, no.6, pp.1453-1466, 2018 (SCI-Expanded)
- IV. **Global attractor for the regularized Benard problem**
KAYA M., ÇELEBİ A. O.
APPLICABLE ANALYSIS, vol.93, no.9, pp.1989-2001, 2014 (SCI-Expanded)
- V. **Existence of weak solutions of the g -Kelvin-Voight equation**
KAYA M., ÇELEBİ A. O.
MATHEMATICAL AND COMPUTER MODELLING, vol.49, pp.497-504, 2009 (SCI-Expanded)
- VI. **On verifiability of models of the motion of large eddies in turbulent flows**
Kaya M., Layton W. J.
Differential and Integral Equations, vol.15, no.11, pp.1395-1407, 2002 (SCI-Expanded)

Articles Published in Other Journals

- I. **Global Existence and Uniqueness of The Inviscid Velocity-Vorticity Model of The g -Navier-Stokes Equations**
Kazar Ö., Kaya M.
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.4, pp.695-702, 2022 (Peer-Reviewed Journal)
- II. **ON THE RATE OF CONVERGENCE OF THE g -NAVIER-STOKES EQUATIONS**
KAYA M., Kazar O., DİNLEMEZ KANTAR Ü.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.1, pp.87-97, 2019 (ESCI)
- III. **Structural Stability For The Benard Problem With Voight Regularization**
KAYA M.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.31, no.3, pp.890-896, 2018 (ESCI)
- IV. **On the Benard Problem with Voight Regularization**
KAYA M., ÇELEBİ A. O.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.28, no.3, pp.523-533, 2015 (ESCI)
- V. **Existence of weak solutions for a scale similarity model of the motion of large eddies in turbulent**

flow

Kaya M.

Journal of Applied Mathematics, no.9, pp.429-446, 2003 (Scopus)

VI. Polynomial solutions for an elliptic partial differential equations

Kaya M.

Gazi.Üni.Fen Bil. Ens. Dergisi, vol.12, no.3, pp.531-536, 1999 (Peer-Reviewed Journal)

VII. Polynomial solutions for a class of singular partial differential equations

Altın A., Kaya M.

Commun Fac. Sci Univ. Ank. Ser. A1, vol.46, pp.183-189, 1997 (Peer-Reviewed Journal)

VIII. The Extension of Kelvin principle and Bateman Theorem For A Class of Hyperbolic Parabolic Type Equation

Kaya M.

Gazi.Üni Fen-Edebiyat Fak.Fen Bil. Dergisi, vol.7, pp.145-154, 1997 (Peer-Reviewed Journal)

IX. Some Extensions of Brill s theorem

Altın A., Kaya M.

Hacet.Bull. Nat. Sci.Eng. Ser.B, vol.18, pp.57-66, 1997 (Peer-Reviewed Journal)

Books & Book Chapters

I. Sobolev Uzayları ve Eliptik Sınır Değer Problemlerine Giriş

KAYA M., DİNLEMEZ KANTAR Ü.

Palme, 2018

Refereed Congress / Symposium Publications in Proceedings

I. Structural stability for the Benard problem with Voight regularization

KAYA M.

International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018

II. Continuous Data Assimilation for the Two Dimensionalg-Bénard Problem

ÖZLÜK M., KAYA M.

2. workshop on nonlinear PDEs Applied Mathematics, İzmir, Turkey, 8 - 10 August 2017

III. Periyodik Sınır Koşulları Altında g-BénardProbleminin Yerel Olmayan Çekicilerinin Varlığı

ÖZLÜK M., KAYA M.

12. Ankara Matematik Günleri, Turkey, 25 - 26 May 2017, pp.46

IV. Determining Modes of the g Bénard Problem

ÖZLÜK M., KAYA M.

workshop on nonlinear PDEs on Applied Mathematics, İzmir, Turkey, 26 - 28 August 2016

V. Structural stability for g Benard problem

ÖZLÜK M., KAYA M.

International Conference on Applied Mathematics and Analysis in Memory of Prof. Gusein Sh. Guseinov (Hüseyin Şirin Hüseyin) 1951-2015, Ankara, Turkey, 11 - 13 June 2016, pp.73

VI. Kazar Özge, Kaya Meryem, On the rate of conergence of the g-Navier-Stokes Equations to the Navier-Stokes equations,

KAZAR Ö., KAYA M.

3 rd International Eurasian Conference on Mathematical Sciences and Applications, Vienna, Austria, 25 - 28 August 2014

VII. Determining modes of g- Navier-Stokes equations (2013), (Özet bildirisi).

KAZAR Ö., KAYA M.

2 nd International Eurasian Conference on Mathematical Sciences and Applications, Sarajevo, Bosnia And Herzegovina, 26 - 29 August 2013

VIII. **Global well-posedness of the three dimensional Benard Problem, (2013), (Özet bildirisi).**

KAYA M., ÇELEBİ A. O.

The 12 th International workshop on dynamical systems and applications, Ankara, Turkey, 12 - 15 August 2013

IX. **Existence of weak solution of the g- Kelvin Voigt Equations**

KAYA M., ÇELEBİ A. O.

The 6 th International ISAAC Congress, Ankara, Turkey, 15 August 2007

X. **Türbülanslı akışlarda Büyük Girdap hareketlerinin Modelleri Üzerine**

KAYA M.

I. Ankara Matematik Çalıştayı, Ankara, Turkey, 01 June 2006

XI. **A representation Theorem of the Spherical Wave Functions**

KAYA M.

II. Kızılırmak Uluslararası Fen Bilimleri Kongresi, Kırıkkale, Turkey, 20 May 1998

XII. **Singüler Katsayılı Bir Denklem için Polinom Çözümler**

ALTIN A., KAYA M.

Sakarya Matematik Sempozyumu, Sakarya, Turkey, 11 September 1997

XIII. **Ultrahiperbolik bir denklem sınıfı için Bateman ve Brill Teoremleri**

KAYA M., ALTIN A.

viii Diferensiyel Denklemler Sempozyumu, Datça, Turkey, 19 September 1994

Scientific Refereeing

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, December 2022

GAZİ UNIVERSITY JOURNAL OF SCIENCE, National Scientific Refreed Journal, January 2018

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, January 2018

Metrics

Publication: 31

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