

Prof. Ekrem AYDINER

Personal Information

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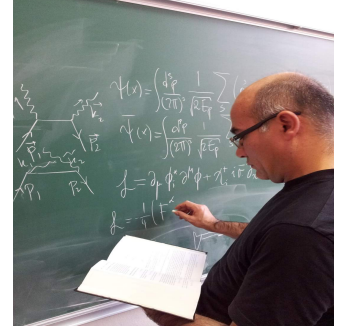
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Address: İstanbul Üniversitesi Fen Fakültesi Fizik Bölümü Vezneciler İstanbul



International Researcher IDs

ScholarID: WqQo9wEAAAAJ

ORCID: 0000-0002-0385-9916

Publons / Web Of Science ResearcherID: D-6193-2017

ScopusID: 6507286651

Yoksis Researcher ID: 175747

Education Information

Doctorate, Cukurova University, Fen Edebiyat Fakültesi, Fizik , Turkey 1996 - 2003

Postgraduate, Cukurova University, Fen Edebiyat Fakültesi, Fizik Bölümü, Turkey 1994 - 1996

Undergraduate, Ankara University, Fen Fakültesi, Fizik Bölümü, Turkey 1986 - 1993

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Spin Camlarda Spin Durulma Süreçlerinin Modellenmesi, Cukurova University, Fen Fakültesi, Fizik Bölümü, 2003

Postgraduate, Spin Camların Fiziksel Özellikleri, Cukurova University, Fen Fakültesi, Fizik Bölümü, 1996

Research Areas

Psychiatry, Philosophy, History of Science, Simulation and Modelling, Complexity Theory, Biophysics, Neurobiophysics, Physics, Stars, Interdisciplinary Physics and Related Science and Technology Areas, Heat Transfer, Quantum Mechanics, Fields Theory and Relativity, Basic Particles and Areas, General Theory of Particles and Fields, Special theories and interaction models, particle systematics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Equations of State, Phase Equilibria, and Phase Transitions, Thermal Properties of Condensed Matter, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Magnetic Properties and Materials, Magnetic Resonances and Relaxation, Natural Sciences

Academic Titles / Tasks

Professor, Istanbul University, Faculty of Science, Department of Physics, 2014 - Continues
Professor, Universitaet Potsdam, Insitute of Physik / Theoretical Physics, 2022 - 2022
Professor, Humboldt-Universitaet zu Berlin, Insitute of Physik, 2022 - 2022
Professor, Istanbul Yeni Yuzyil University, Mimarlık Ve Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği, 2018 - 2018
Other, Universitaet Potsdam, Theoretical Physics, Theoretical Physics, 2018 - 2018
Other, Universitaet Potsdam, Theoretical Physics, Theoretical Physics, 2016 - 2016
Other, Middlesex University, Computing Sciences, Communication , 2014 - 2014
Associate Professor, Istanbul University, Faculty of Science, Department of Physics, 2009 - 2014
Other, The University of Leeds, Faculty Of Mathematics And Physical Sciences, School Of Physics And Astronomy, 2011 - 2011
Associate Professor, Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü, 2008 - 2009
Assistant Professor, Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü, 2003 - 2008
Research Assistant, Cukurova University, Fen Fakültesi, Fizik Bölümü, 1994 - 2003
Research Assistant, Bogazici University, Feza Gürsey Enstitüsü, Temel Bilimler, 1998 - 1998
Student, Ankara University, Faculty Of Science, Department Of Physics, 1986 - 1993

Academic and Administrative Experience

Head of Department, Istanbul University, Faculty Of Science, Department Of Physics, 2017 - 2020
Deputy Head of Department, Dokuz Eylul University, Faculty Of Science, Department Of Physics, 2004 - 2009
Head of Department, Dokuz Eylul University, Faculty Of Science, Department Of Physics, 2003 - 2009

Courses

Fizikte Modelleme ve Simülasyon, Undergraduate, 2021 - 2022
Kaos Teorisi, Postgraduate, 2018 - 2019
Kuantum Alanlar Teorisi, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014
Sonlu Sıcaklık Kuantum Alan Teorisi, Doctorate, 2018 - 2019, 2013 - 2014
Sinyal ve Sistemler, Undergraduate, 2018 - 2019
Kaos Teorisi, Postgraduate, 2018 - 2019
Kuantum Hesapama Teorisi, Postgraduate, 2017 - 2018
Bilim Tarihi ve Felsefesi, Undergraduate, 2017 - 2018
Termodinamik ve İstatistik Mekanik I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Optoelektronik ve Lazerler, Undergraduate, 2018 - 2019
İleri kuantum mekaniği, Postgraduate, 2017 - 2018
Sinyal ve Sistemler, Undergraduate, 2017 - 2018
Termodinamik ve İstatistik Mekanik II, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Termodinamik ve İstatistik Mekaniği I, Undergraduate, 2015 - 2016
Kuantum Kaos: Teori ve Uygulamalar, Postgraduate, 2015 - 2016, 2013 - 2014
Termodinamik ve İstatistik Mekaniği II, Undergraduate, 2015 - 2016
Kuantum Hesaplama Teorisine Giriş, Postgraduate, 2014 - 2015
Kuantum Kaos, Postgraduate, 2014 - 2015
Karşılaştırmalı F90 ve C++, Doctorate, 2015 - 2016
Sonlu Sıcaklık Kuantum Alan Teorisi II, Doctorate, 2014 - 2015
Fizikte İleri Konular, Undergraduate, 2014 - 2015
Sonlu Sıcaklık Kuantum Alan Teorisi I, Doctorate, 2014 - 2015
Kuantum Kaos: Teori ve Uygulamaları, Postgraduate, 2013 - 2014
Classical Electrodynamics II, Doctorate, 2013 - 2014, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008

İstatistik Fizik II, Undergraduate, 2012 - 2013, 2010 - 2011, 2009 - 2010, 2008 - 2009
Kuantum Alanlar Teorisi, Postgraduate, 2013 - 2014
Termodinamik ve İstatistik Mekanik Lab., Undergraduate, 2013 - 2014
Kuantum Hesaplama Teorisine Giriş, Postgraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Teorik Fizikte Bilgisayarlı Hesaplama, Undergraduate, 2012 - 2013, 2011 - 2012, 2009 - 2010
Termodinamik ve İstatistik Mekanik II, Undergraduate, 2013 - 2014
Termodinamik ve İstatistik Mekanik I, Undergraduate, 2013 - 2014
Sonlu Sıcaklık Kuantum Alanlar Teorisi, Doctorate, 2013 - 2014
Fizikte İleri Konular, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Termodinamik ve İstatistik Mekanik Lab, Undergraduate, 2013 - 2014
Kuantum Kaos: Teori ve Uygulamaları, Postgraduate, 2012 - 2013, 2011 - 2012, 2009 - 2010
Termodinamik ve İstatistik Mekanik II, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Teroik Fizikte Bilgisayarlı Hesaplama, Undergraduate, 2010 - 2011
Seminer, Postgraduate, 2010 - 2011
Classical Electrodynamics I, Doctorate, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008
Seminer, Postgraduate, 2009 - 2010
Elektromagnetik Teori II, Undergraduate, 2008 - 2009, 2007 - 2008
Computational Physics I, Doctorate, 2008 - 2009, 2007 - 2008, 2006 - 2007
Bilgisayar Prog. II (Fortran 90), Undergraduate, 2008 - 2009, 2005 - 2006, 2004 - 2005
Elektromagnetik Teori I, Undergraduate, 2008 - 2009, 2007 - 2008
Nonlinear dynamics and chaos theory I, Doctorate, 2008 - 2009, 2004 - 2005
Computational Physics II, Doctorate, 2008 - 2009, 2006 - 2007
İstatistik Fizik I, Undergraduate, 2008 - 2009
Statistical Mechanics I, Doctorate, 2008 - 2009
Nonlinear dynamics and chaos theory II, Doctorate, 2008 - 2009, 2004 - 2005
Statistical Mechanics II, Doctorate, 2008 - 2009
Fizikte Matematiksel Yöntemler II, Undergraduate, 2006 - 2007, 2004 - 2005
Akışkanlar Mekaniği, Undergraduate, 2006 - 2007
Fizikte Matematiksel Yöntemler II, Undergraduate, 2005 - 2006, 2003 - 2004
Fizikte Matematiksel Yöntemler I, Undergraduate, 2006 - 2007
Mathematical Physics II, Doctorate, 2006 - 2007, 2004 - 2005
Mathematical Physics I, Doctorate, 2005 - 2006, 2004 - 2005
Fizikte Matematiksel Yöntemler I, Undergraduate, 2005 - 2006, 2004 - 2005, 2003 - 2004
Bilgisayar Prog. II (Fortran 90), Undergraduate, 2004 - 2005
Fizik I (Mekanik), Undergraduate, 2003 - 2004
Fizik II (Elektrik), Undergraduate, 2003 - 2004
Bilgisayar Prog. II (Fortran 90), Undergraduate, 2003 - 2004
Bilgisayar Prog. III (C++), Undergraduate, 2003 - 2004
Stochastic processes in physics I, Doctorate, 2004 - 2005
Fizikte Matematiksel Uygulamalar I, Doctorate, 2003 - 2004
Fizikte Matematiksel Uygulamalar II, Doctorate, 2003 - 2004
Bilgisayar Programlama (Fortran 90), Undergraduate, 2003 - 2004
Computational Physics, Doctorate, 2003 - 2004
Fizik (Mekanik) I Uygulama, Undergraduate, 1994 - 1995

Advising Theses

Aydiner E., Determining Scaling Relationships for the Distribution Functions of Covid-19 Outbreak, Developing Accurate Predictions and Chaos Control, Doctorate, E.Yılmaz(Student), Continues
Aydiner E., Kütleçekim Dalgalarında Bellek Etkilerinin Analizi, Doctorate, İ.Bargan(Student), Continues

Aydiner E., FLRW uzay-zamanda nötrino Osilasyonu, Doctorate, H.Abdolalizadeh(Student), Continues
Aydiner E., Memristör (Bellekli Direnç) Elemanlarının Fiziksel Özelliklerinin İncelenmesi, Doctorate, A.Drouba(Student), Continues
Aydiner E., Postgraduate, Y.Alsham(Student), 2022
Aydiner E., Yüksek Boyutlu Lotka-Volterra Tipindeki Bağışık Denklemlerde Kaos Analizi, Postgraduate, M.Hajbo(Student), 2022
Aydiner E., Karanlık madde adayı aksiyon parçacıklar, Postgraduate, A.Akberov(Student), 2022
Aydiner E., Investigation of Cosmological Phenomena by Using Generalized Uncertainty Principle, Doctorate, Ö.Ökcü(Student), 2021
Aydiner E., Bunalmalı Spin-Örgü Sisteminin Termodinamiği, Doctorate, D.Han(Student), 2021
Aydiner E., Investigation of the Particle Creation Effects in the Higher Dimensional Friedmann-Robertson-Walker Models, Doctorate, Ö.Sevinç(Student), 2019
Aydiner E., Etkileşimli modeller kullanarak evren dinamiğinin incelenmesi, Doctorate, D.Gemici(Student), 2019
Aydiner E., Döviz Kurlarının Zaman Serisi Analizleri, Postgraduate, E.Yılmaz(Student), 2017
Aydiner E., Karadeliklerin Termodinamiği, Postgraduate, Ö.Ökcü(Student), 2016
Aydiner E., Farklı Karanlık enerji modelleri için evren dinamiğinin incelenmesi, Postgraduate, N.Bostan(Student), 2015
Aydiner E., Kuantum Spin Sistemlerinde Kuantum Dolanıklık, Postgraduate, S.Deniz(Student), 2013
Aydiner E., Bose-Einstein Yoğuşması, Doctorate, N.Üzar(Student), 2012
Aydiner E., Magnetik sistemlerin Monte Carlo Simülasyonları, Doctorate, E.Kış(Student), 2012
Aydiner E., Kuantum yürüyüş ve uygulamaları, Doctorate, M.Gönüloğlu(Student), 2011
Aydiner E., Tsallis entropik eşitsizliği, Postgraduate, S.Uslu(Student), 2009
Aydiner E., Düşük boyutlu spin sistemlerinde kuantum dolanıklık, Doctorate, C.Akyüz(Student), 2008
Aydiner E., Yerkürenin magnetik kutup salınımının modellenmesi, Postgraduate, M.Altürk(Student), 2006
Aydiner E., Sosyal ve politik olayların modellenmesi, Postgraduate, M.Gönüloğlu(Student), 2006
Aydiner E., Kuantum bilgi entropisi, Postgraduate, C.Orta(Student), 2006
Aydiner E., Sonlu fark yöntemi ve uygulamaları, Postgraduate, Ş.Hayran(Student), 2005

Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Akdeniz Üniversitesi, October, 2023
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Sabancı Üniversitesi, September, 2023
Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Hitit Üniversitesi, August, 2023
Doctorate, Doctorate, İstanbul Teknik Üniversitesi, February, 2023
Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, February, 2023
Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, February, 2023
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Uluslararası Fırat Üniversitesi, November, 2022
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, İzmir Yüksek Teknoloji Enstitüsü, September, 2022
Doctoral Examination, Doctoral Examination, Koç Üniversitesi, February, 2021
Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, January, 2021
Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, January, 2021
Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, January, 2021
Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, January, 2021
Doctorate, Doctorate, uluslararası islam üniversitesi, September, 2020
Doctorate, Doctorate, İstanbul Üniversitesi, September, 2020
Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Uluslararası Fırat Üniversitesi,

September, 2020

Post Graduate, Post Graduate, Hacettepe Üniversitesi, July, 2020

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Muğla Sıtkı Koçman Üniversitesi, January, 2020

Doctorate, Doctorate, Koç Üniversitesi, January, 2020

Doctorate, Doctorate, Quaid-i Azam Medical College, July, 2019

Doctorate, Doctorate, İstanbul Üniversitesi, July, 2019

Doctorate, Doctorate, İstanbul Üniversitesi, May, 2019

Doctorate, Doctorate, Quaid-i Azam Medical College, March, 2019

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Mersin Üniversitesi, February, 2019

Doctorate, Savaş Birol Tez Doktora Tez Savunması İstanbul Üni Fizik, Savaş Birol Tez Doktora Tez Savunması İstanbul Üni Fizik, August, 2018

Doctoral Examination, Doktora Yeterlilik, Nur c Koç Üniversitesi, November, 2017

Associate Professor Exam, Dr. Sezen Sekmen, Doçentlik Sınavı, Dr. Sezen Sekmen, Doçentlik Sınavı, October, 2017

Associate Professor Exam, Associate Professor Exam, İstanbul Teknik Üniversitesi, October, 2017

Post Graduate, İrem Topal Yüksek Lisans İTÜ Fizik Mühendisliği, İrem Topal Yüksek Lisans İTÜ Fizik Mühendisliği, August, 2017

Post Graduate, Post Graduate, İstanbul Üniversitesi, June, 2017

Doctorate, Jüri, Onur Buğra Kolcu Doktora Tez Savunması İstanbul Üni Fizik, May, 2017

Doctoral Examination, TrakyaÜ, Trakya Üni Fizik Böl., March, 2017

Associate Professor Exam, UAK Doçentlik Sınavı, YOK-ÜAK, February, 2017

Doctoral Examination, Akdeniz Ü Fizik Bölümü, AKdeniz Ü. Fizik Bölümü, January, 2017

Doctorate, Doktora Tezi, istanbul Üni, October, 2016

Associate Professor Exam, Sınav, YOK, December, 2015

Associate Professor Exam, Sınav, YOK, December, 2015

Associate Professor Exam, Doçentlik Sınav Jürisi, YÖK, November, 2015

Associate Professor Exam, Doçentlik Dınav Jürisi, YÖK, November, 2015

Associate Professor Exam, doçentlik sınavı, YÖK, October, 2015

Associate Professor Exam, Jüri, YÖK, October, 2015

Associate Professor Exam, Jüri, YÖK, October, 2015

Post Graduate, Tez Savunma Jurisi, İstanbul Üniversitesi, June, 2015

Associate Professor Exam, Doçent Jurisi, YOK, May, 2015

Competition, Liselerarası Proje Yarışması, Okyanus Koleji, April, 2013

Doctorate, Tez Savunma Jürisi, İstanbul Üniversitesi (Sercan Şen), March, 2013

Doctorate, Tez Savunma Jürisi, Dokuz Eylül Üniversitesi (Yusuf Yüksel), March, 2013

Doctorate, Tez Savunma Jürisi, İstanbul Üniversitesi (Neslihan Üzar), June, 2012

Doctorate, Tez Savunma Sınavı, Dokuz Eylül Üniversitesi (Ebru Kış-Çam), June, 2012

Competition, Liselerarası proje yarışması, Okyanus Koleji, April, 2012

Doctorate, Tez Savunma Jürisi, Dokuz Eylül Üniversitesi (Meltem Gönülo), December, 2011

Competition, Liselerarası proje yarışması, Okyanus Koleji, May, 2011

Competition, Okyanus Fen Bilimleri Proje Yarışması , Okyanus Koleji, April, 2010

Post Graduate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Sibel Uslu), May, 2009

Doctorate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Cenk Akyüz), July, 2008

Competition, Liselerarası fen ve müh. yarışması, Dokuz Eylül Ü., May, 2007

Post Graduate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Cenk Orta), July, 2006

Post Graduate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Meltem Gönülo), June, 2006

Post Graduate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Mesut Altürk), June, 2006

Competition, Liselerarası fen ve müh. yarışması, Dokuz Eylül Ü., May, 2006

Competition, Liselerarası fen ve müh. yarışması, Dokuz Eylül Ü., May, 2005

Competition, Liselerarası fen ve mühendislik yarışması, Dokuz Eylül Üniversitesi, May, 2004

Post Graduate, Tez Savunma Jurisi, Dokuz Eylül Üniversitesi (Şenay Hayran), April, 2004

Taught Courses And Trainings

Aydiner E., Lise Öğrencileri için Kuantum Mekaniği, 2018 - 2018

Aydiner E., Araştırma Odaklı Monte Carlo Simülasyon Uygulamaları Eğitimi, 2015 - 2016

Aydiner E., Programcılık Eğitimi (Fortran 90 ve C++), 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Anomalous transport of the ion-channels**
Aydiner E.
CANADIAN JOURNAL OF PHYSICS, vol.1, no.1, pp.1-9, 2024 (SCI-Expanded)
- II. **Quantum heat engine with level degeneracy for oscillator-shaped potential well**
Evkaya Y., Ökcü Ö., Aydiner E.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.1, no.11, pp.1-11, 2023 (SCI-Expanded)
- III. **Modified Friedmann equations from fractional entropy**
Çoker Z., Ökcü Ö., Aydiner E.
EPL, vol.143, no.5, 2023 (SCI-Expanded)
- IV. **Universal Pareto laws in agent-based exchange models: debt and varying initial-money distributions**
AYDINER E., Cherstvy A. G., Metzler R., Sokolov I. M.
European Physical Journal B, vol.96, no.9, 2023 (SCI-Expanded)
- V. **Anomalous Cyclic in the Neutrino Oscillations**
Aydiner E.
SCIENTIFIC REPORTS, vol.1, no.1, pp.1-11, 2023 (SCI-Expanded)
- VI. **The extended uncertainty principle effects on the phase transitions of Reissner-Nordström and Schwarzschild black holes**
Ökcü Ö., Aydiner E.
NUCLEAR PHYSICS B, vol.1, no.1, pp.1-11, 2022 (SCI-Expanded)
- VII. **Investigating bounds on the extended uncertainty principle metric through astrophysical tests**
Ökcü Ö., Aydiner E.
EPL, vol.138, no.3, 2022 (SCI-Expanded)
- VIII. **Complexity of HCl and H-2 molecules under q-deformed Morse potential**
NUTKU F., AYDINER E., Sen K. D.
INDIAN JOURNAL OF PHYSICS, vol.96, no.4, 2022 (SCI-Expanded)
- IX. **Late time transition of Universe and the hybrid scale factor**
Aydiner E., Başaran-Öz I., Dereli D. T., Sarısan M.
European Physical Journal C, vol.82, no.39, pp.1-15, 2022 (SCI-Expanded)
- X. **Time-fractional kinetic equation for the non-equilibrium processes**
Aydiner E.
Scientific Reports, vol.1, no.1, pp.1-11, 2021 (SCI-Expanded)
- XI. **Space-fractional quantum heat engine based on level degeneracy**
Aydiner E.
Scientific Reports, vol.1, no.1, pp.1-8, 2021 (SCI-Expanded)
- XII. **Memory effects and KWW relaxation of the interacting magnetic nano-particles**
Aydiner E.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.572, 2021 (SCI-Expanded)
- XIII. **Observational tests of the generalized uncertainty principle: Shapiro time delay, gravitational redshift, and geodetic precession**
Okcu O., AYDINER E.
NUCLEAR PHYSICS B, vol.964, 2021 (SCI-Expanded)
- XIV. **Quantum Szilard engine for the fractional power-law potentials**

- Aydiner E.
SCIENTIFIC REPORTS, vol.11, no.1, 2021 (SCI-Expanded)
- XV. **GUP-Corrected van der Waals Black Holes**
Okcu O., AYDINER E.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.59, no.9, pp.2839-2851, 2020 (SCI-Expanded)
- XVI. **Repulsive Casimir Force of the Free and Harmonically Trapped Bose Gas in the Bose-Einstein Condensate Phase**
AYDINER E.
ANNALEN DER PHYSIK, vol.532, no.8, 2020 (SCI-Expanded)
- XVII. **Modified Friedmann equations from DSR-GUP**
Okcu O., Corda C., AYDINER E.
EPL, vol.129, no.5, 2020 (SCI-Expanded)
- XVIII. **Complexity study of q-deformed quantum harmonic oscillator**
Nutku F., Sen K. D., Aydiner E.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.533, 2019 (SCI-Expanded)
- XIX. **A Simple Model for Stretched Exponential Relaxation in Three-Level Jumping Process**
Aydiner E.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.256, 2019 (SCI-Expanded)
- XX. **Particle Creation in Friedmann-Robertson-Walker Universe**
Sevinç Ö., Aydiner E.
GRAVITATION & COSMOLOGY, vol.25, pp.397-406, 2019 (SCI-Expanded)
- XXI. **Money distribution in agent-based models with position-exchange dynamics: the Pareto paradigm revisited**
Aydiner E., Cherstvy A. G., Metzler R.
EUROPEAN PHYSICAL JOURNAL B, vol.92, 2019 (SCI-Expanded)
- XXII. **Influence of Linear Plus Quadratic Interactions Between Dark Components of the Universe on Thermodynamics**
Gemici-Deveci D., Aydiner E.
GRAVITATION & COSMOLOGY, vol.25, no.1, pp.75-81, 2019 (SCI-Expanded)
- XXIII. **Quantum heat engine model of mixed triangular spin system as a working substance**
Aydiner E., Han S. D.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.509, pp.766-776, 2018 (SCI-Expanded)
- XXIV. **Joule-Thomson expansion of Kerr-AdS black holes**
Ökcü Ö., Aydiner E.
EUROPEAN PHYSICAL JOURNAL C, vol.78, 2018 (SCI-Expanded)
- XXV. **Investigation of Bose-Einstein Condensates in q-Deformed Potentials with First Order Perturbation Theory**
Nutku F., Aydiner E.
COMMUNICATIONS IN THEORETICAL PHYSICS, vol.69, no.2, pp.154-158, 2018 (SCI-Expanded)
- XXVI. **Wealth distribution, Pareto law, and stretched exponential decay of money: Computer simulations analysis of agent-based models**
Aydiner E., Cherstvy A. G., Metzler R.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.490, pp.278-288, 2018 (SCI-Expanded)
- XXVII. **Chaotic universe model**
Aydiner E.
SCIENTIFIC REPORTS, vol.8, 2018 (SCI-Expanded)
- XXVIII. **Quadratic interaction effect on the dark energy density in the universe**
Deveci D. G., Aydiner E.
CHINESE PHYSICS B, vol.26, 2017 (SCI-Expanded)
- XXIX. **Entanglement in $(1/2,1)$ Mixed-Spin XY Model with Long-Range Interaction**
Han S. D., Tufekci T., Spiller T. P., Aydiner E.

- INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.56, no.5, pp.1474-1483, 2017 (SCI-Expanded)
- XXX. **Joule-Thomson expansion of the charged AdS black holes**
Ökcü Ö., Aydiner E.
EUROPEAN PHYSICAL JOURNAL C, vol.77, 2017 (SCI-Expanded)
- XXXI. **Rotational stretched exponential relaxation in random trap-barrier model**
Aydiner E.
CHINESE PHYSICS B, vol.24, no.7, 2015 (SCI-Expanded)
- XXXII. **Current and efficiency of Brownian particles under oscillating forces in entropic barriers**
Nutku F., Aydiner E.
CHINESE PHYSICS B, vol.24, no.4, 2015 (SCI-Expanded)
- XXXIII. **Thermal entanglement in the mixed three-spin X X Z Heisenberg model on a triangular cell**
Han S. D., Aydiner E.
CHINESE PHYSICS B, vol.23, no.5, 2014 (SCI-Expanded)
- XXXIV. **Magnetic Behavior of Ternary Prussian Blue Analog in Presence Single-Ion Anisotropy**
Cam E. K., Aydiner E.
IEEE TRANSACTIONS ON MAGNETICS, vol.49, no.9, pp.4951-4955, 2013 (SCI-Expanded)
- XXXV. **Survival Probability in a Quantum Walk on a One-Dimensional Lattice with Partially Absorbing Traps**
Gonulol M., Aydiner E., Shikano Y., Mustecaplioglu O. E.
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE, vol.10, no.7, pp.1596-1600, 2013 (SCI-Expanded)
- XXXVI. **Solutions of the Gross-Pitaevskii and time-fractional Gross-Pitaevskii equations for different potentials with Homotopy Perturbation Method**
AYDINER E.
arXiv, vol.1, no.1, pp.1-10, 2012 (SCI-Expanded)
- XXXVII. **Thermal and magnetic properties of a ferrimagnetic nanoparticle with spin-3/2 core and spin-1 shell structure**
Yuksel Y., Aydiner E., Polat H.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.323, no.23, pp.3168-3175, 2011 (SCI-Expanded)
- XXXVIII. **Survival probability in a one-dimensional quantum walk on a trapped lattice**
Gonulol M., Aydiner E., Shikano Y., Mustecaplioglu O. E.
NEW JOURNAL OF PHYSICS, vol.13, 2011 (SCI-Expanded)
- XXXIX. **Compensation temperature of 3d mixed ferro-ferrimagnetic ternary alloy**
Aydiner E., Kış-Çam E.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.322, pp.1706-1709, 2010 (SCI-Expanded)
- XL. **Dependence on dilution of critical and compensation temperatures of a two-dimensional mixed spin-1/2 and spin-1 system**
Aydiner E., Yueksel Y., Kis-Cam E., Polat H.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.321, no.19, pp.3193-3197, 2009 (SCI-Expanded)
- XLI. **Decoherence in two-dimensional quantum random walks with traps**
Gönülol M., Aydiner E., Mustecaplioglu O. E.
PHYSICAL REVIEW A, vol.80, 2009 (SCI-Expanded)
- XLII. **Monte Carlo simulation for statistical mechanics model of ion-channel cooperativity in cell membranes**
Erdem R., Aydiner E.
PHYSICAL REVIEW E, vol.79, 2009 (SCI-Expanded)
- XLIII. **Thermal entanglement of a two-qutrit Ising system with Dzialoshinski-Moriya interaction**
Akyuz C., Aydiner E., Müstecaplıoğlu Ö.
OPTICS COMMUNICATIONS, vol.281, no.20, pp.5271-5277, 2008 (SCI-Expanded)
- XLIV. **Entanglement in ising chain with inhomogeneous magnetic field**
Akyuz C., Aydiner E.
CHINESE PHYSICS LETTERS, vol.25, no.5, pp.1557-1560, 2008 (SCI-Expanded)

- XLV. **Quantum information entropies of the eigenstates of the Morse potential**
AYDINER E., Orta C., Sever R.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.22, no.3, pp.231-237, 2008 (SCI-Expanded)
- XLVI. **Stretched exponential relaxation in disordered complex systems: Fractal time random walk model**
AYDINER E.
CHINESE PHYSICS LETTERS, vol.24, no.6, pp.1486-1489, 2007 (SCI-Expanded)
- XLVII. **Rotational Brownian motion on sphere surface and rotational relaxation**
Aydiner E.
CHINESE PHYSICS LETTERS, vol.23, no.12, pp.3352-3355, 2006 (SCI-Expanded)
- XLVIII. **Magnetization and quadrupolar plateaus in the one-dimensional antiferromagnetic spin-3/2 and spin-2 Blume-Capel model**
Aydiner E., Akyuz C., Gonulol M., Polat H.
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- XLIX. **Time dependence of the survival probability of an opinion in a closed community**
Aydiner E., Gonulol M.
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- L. **Magnetic and thermal behaviour of one-dimensional antiferromagnetic spin-1 Ising chain at low temperatures**
AYDINER E., Akyüz C.
CHINESE PHYSICS LETTERS, vol.22, no.9, pp.2382-2385, 2005 (SCI-Expanded)
- LI. **Anomalous rotational relaxation: A fractional Fokker-Planck equation approach**
Aydiner E.
PHYSICAL REVIEW E, vol.71, 2005 (SCI-Expanded)
- LII. **Magnetic properties of one-dimensional ferrimagnetic mixed (1,3/2) spin chain with single-ion anisotropy**
AYDINER E.
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- LIIL. **The time evaluation of resistance probability of a closed community against occupation in a Sznajd-like model with synchronous updating: A numerical study**
Aydiner E.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.9, pp.1291-1299, 2004 (SCI-Expanded)
- LIV. **A one-dimensional model for nonexponential relaxation in a spin glass or glassy system**
Aydiner E., Kiymac K.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.1, pp.163-173, 2004 (SCI-Expanded)
- LV. **One-dimensional model for Non-Exponential Relaxation in A Spin Glass or Glassy Systems**
AYDINER E., Kiymaç K.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.1, 2004 (SCI-Expanded)
- LVI. **A simple chaotic neuron model: Stochastic behavior of neural networks**
Aydiner E., Vural A., Ozcelik B., Kiymac K.
INTERNATIONAL JOURNAL OF NEUROSCIENCE, vol.113, no.5, pp.607-619, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. **Size effects on the open probability of two-state ion channel system in cell membranes using microcanonical formalism based on gamma function**
Aydiner E., Erdem R.
JOURNAL OF PHYSICS: CONFERENCE SERIES, vol.1, no.11, pp.1-11, 2009 (Scopus)
- II. **Quantum Information Entropies for the Morse Potential**
Aydiner E., Orta C., Sever R.
TURKISH JOURNAL OF PHYSICS, vol.30, no.5, pp.407-410, 2006 (ESCI)

- III. **Some Structural and Electrical Properties of $Mn_xMg_{1-x}TiO_3$**
AYDINER E., Özkurt B., Ekicibil A., Coşkun A., Özçelik B., Kıymaç K.
Balkan Physics Letters, vol.12, no.1, pp.9-23, 2004 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Frontiers of Fundamental Physics FFP16**
Aydiner E. (Editor)
Springer, London/Berlin , London, 2023
- II. **Matter, dark matter, dark energy interactions and new physics**
Aydiner E.
in: Frontiers of Fundamental Physics FFP16, Ekrem Aydiner, Editor, Springer, London/Berlin , London, pp.1-8, 2023

Refereed Congress / Symposium Publications in Proceedings

- I. **Joule-Thomson expansion of the charged AdS black holes**
Ökcü Ö., AYDINER E.
Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, İstanbul, Turkey, 8 - 09 February 2018, pp.21
- II. **Quadratic interaction effect on the dark energy density in the universe**
DEVECİ D. G., AYDINER E.
Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, İstanbul, Turkey, 8 - 09 February 2018, pp.22
- III. **Influence of anharmonicity on statistical complexity of dilute Bose gases under cylindrical traps**
AYDINER E., NUTKU F., Sen K.
Kuantum Optiği ve Bilişim Toplantısı, İstanbul, Turkey, 1 - 02 February 2018, pp.1-3
- IV. **Statistical Complexity Study of q-Deformed Harmonic Oscillator and Morse Potentials**
NUTKU F., Sen K., AYDINER E.
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- V. **Sigortacılıkta Riskin Belirlenmesinde Bir Simülasyon Uygulaması**
SARUL L. S., FİDAN KEÇECİ N., AYDINER E.
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- VI. **Entropy, Inequality and Statistical Complexity for the Modified Poschl-Teller Potential in Non-Extensive Formalism**
Gemici-Deveci D., Aydiner E.
5th International Conference on Mathematical Modeling in Physical Sciences (IC-MSquare), Athens, Greece, 23 - 26 May 2016, vol.738
- VII. **Investigation of the Bose-Einstein condensation based on classical and fractional approach**
Üzar N., Aydiner E.
Turkish Physical Society 29th International Physics Congress,, Muğla, Turkey, 1 - 04 September 2012, pp.235

Other Publications

- I. **Covid-19 Hazard, Complex Systems and Physics**
Aydiner E.
Other, pp.33-47, 2020
- II. **Kaotik Evren Teorisi Fizikte Paradigma Değişimi Öngörüyor**
Aydiner E.
Presentation, pp.1-2, 2019

- III. **Kaotik Evren Modeli**
Aydiner E.
Presentation, pp.1-2, 2018
- IV. **Casimir Effect of Trapped Ideal Bose Gas with Electrical and Magnetic Potentials.**
arXiv:1508.01040v1
Han D., AYDINER E.
Other, pp.1-10, 2015
- V. **Casimir force for geometrically confined ideal Bose gas in a harmonic-optical potential.**
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AYDINER E.
Other, pp.1-10, 2015
- VI. **Effects of thermal fluctuations on thermodynamic behavior of Reissner-Nordst rm-AdS black hole**
 k    ., Aydiner E.
Other, pp.1-10, 2015
- VII. **Sonsuzluk, G relilik ve Zenon Paradoksları**
AYDINER E.
Other, pp.1, 2005
- VIII. **Bose-Einstein Yo uşması(2001 Nobel Fizik  d l )**
AYDINER E.
Other, pp.22-33, 2003
- IX. **İnsan  nce Resim  izdi**
AYDINER E.
Other, pp.1-10, 2001

Supported Projects

AYDINER E., DERELİ T., Project Supported by Higher Education Institutions, Evrenin Kozmik Evriminin İncelenmesi, 2021 - Continues

AYDINER E.,  KC   ., Project Supported by Higher Education Institutions, Genelleştirilmiş ve Genişletilmiş Belirsizlik İlkelerinin Genel G relilik Uygulamaları, 2021 - Continues

AYDINER E., SARISAMAN M., BAŞARAN  Z I., DERELİ T., Project Supported by Higher Education Institutions, Kaotik Evren Teorisinin Metrik Ba ımlı İncelenmesi, 2019 - 2021

AYDINER E., Project Supported by Higher Education Institutions, Topolojik Kuantum Hesaplama Uygulamaları, 2018 - 2020

AYDINER E., Project Supported by Higher Education Institutions, Kuantum Spin Sistemlerinin Dinami i: XY Spin Modelleri, 2012 - 2020

AYDINER E., Project Supported by Higher Education Institutions, Ekonofizik Modellerin Geliştirilmesi, 2018 - 2018

Aydiner E., TUBITAK Project, Konuk Bilim İnsanı Destekleme, 2018 - 2018

AYDINER E., HAN S. D., Project Supported by Higher Education Institutions, Quantum heat engine with a mixed triangular spin system, 2017 - 2017

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AYDINER E., Project Supported by Higher Education Institutions, KLASİK VE KUANTUM KAOTİK SİSTEMLERİN İNCELENMESİ, 2015 - 2017

AYDINER E., TUBITAK Project, İstanbul Drone, 2016 - 2016

AYDINER E., ERDEM R., Project Supported by Higher Education Institutions, An exact solution of the twostate ion channel system in cell membranes in microcanonical formalism, 2016 - 2016

AYDINER E., Project Supported by Higher Education Institutions, Kompleks a ların etkileşimi, 2015 - 2016

AYDINER E., Project Supported by Higher Education Institutions, FARKLI KARANLIK ENERJİ MODELLERİ İ İN EVREN DİNAMİ İNİN İNCELENMESİ, 2014 - 2015

AYDINER E., Project Supported by Higher Education Institutions, Magneto optiksel potansiyelde tutulan Bozon gazının

Casimir Kuvveti, 2014 - 2015

AYDINER E., Project Supported by Higher Education Institutions, İçinde Fermiyon ve Boson karışımı bulunan iki plaka arasına hapsedilmiş bir uzay için kuantum vakum kuvvetinin hesaplanması, 2012 - 2014

AYDINER E., Project Supported by Higher Education Institutions, HEISENBERG SPİN SİSTEMLERİNDE KUANTUM DOLANIKLIĞIN İNCELENMESİ, 2012 - 2013

AYDINER E., Project Supported by Higher Education Institutions, Dinamik sistemlerde Casimir enerjisinin hesaplanması, 2010 - 2012

AYDINER E., TUBITAK Project, Kuantum yürüyüşte eş-evresizlik, 2009 - 2011

AYDINER E., Project Supported by Higher Education Institutions, Hücre zarında bulunan iyon-kanallarının birbirleriyle etkileşmesinin kanalların açılma olasılığı üzerindeki etkisinin incelenmesi, 2009 - 2010

Activities in Scientific Journals

FRONTIERS OF PHYSICS, Editor, 2022 - Continues

First Editor, 2019 - Continues

Türk J Phys, Editor, 2012 - 2020

Memberships / Tasks in Scientific Organizations

Quantum Technologies with Ultra-Cold Atoms COST Action CA16221, Member, 2018 - Continues

Thermodynamics in the Quantum Regime COST Action MP1209, Member, 2017 - Continues

International Theoretical and Applied Physics (ITAP), Member, 2006 - Continues

Türkiye Beyin Araştırmaları ve Sinirbilimleri Derneği, Member, 2000 - Continues

Türk Fizik Derneği, Member, 2012 - 2015, Turkey

Scientific Refereeing

TURKISH JOURNAL OF PHYSICS, Other Indexed Journal, April 2024

PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, SCI Journal, April 2024

PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, SCI Journal, April 2024

FRONTIERS OF PHYSICS, SCI Journal, April 2024

INDIAN JOURNAL OF PHYSICS, SCI Journal, April 2024

ENTROPY, SCI Journal, March 2024

EUROPEAN PHYSICAL JOURNAL C, SCI Journal, February 2024

PHYSICA SCRIPTA, SCI Journal, February 2024

PHYSICAL REVIEW A - ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, SCI Journal, January 2024

PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, SCI Journal, December 2023

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PHYSICAL REVIEW A - ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, SCI Journal, December 2023

TUBITAK Project, 2248-Mentoring Support Program, Koc University, Turkey, November 2023

NONLINEAR ANALYSIS: MODELLING AND CONTROL, SCI Journal, October 2023

JOURNAL OF PHYSICS A: MATHEMATICAL AND THEORETICAL, SCI Journal, October 2023

PHYSICS LETTERS A, SCI Journal, September 2023

Physics Letters B, SCI Journal, September 2023

PHYSICA SCRIPTA, SCI Journal, September 2023

NUCLEAR PHYSICS B, SCI Journal, September 2023

ISCIENCE, SCI Journal, August 2023

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, August 2023
 CANADIAN JOURNAL OF PHYSICS, SCI Journal, July 2023
 PHYSICA SCRIPTA, SCI Journal, July 2023
 CHINESE PHYSICS C, SCI Journal, July 2023
 JOURNAL OF CLINICAL MEDICINE, SCI Journal, June 2023
 EUROPEAN PHYSICAL JOURNAL C, SCI Journal, June 2023
 SCIENTIFIC REPORTS, SCI Journal, June 2023
 ANNALEN DER PHYSIK (LEIPZIG), SCI Journal, May 2023
 CANADIAN JOURNAL OF PHYSICS, SCI Journal, April 2023
 MODERN PHYSICS LETTERS A, SCI Journal, April 2023
 SCIENTIFIC REPORTS, SCI Journal, April 2023
 UNIVERSE, SCI Journal, April 2023
 INDIAN JOURNAL OF PHYSICS, SCI Journal, February 2023
 PHYSICAL REVIEW E - STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS, National Scientific Refreed Journal, February 2023
 PHYSICAL REVIEW A - ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, SCI Journal, February 2023
 NUCLEAR PHYSICS B, SCI Journal, February 2023
 PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, SCI Journal, February 2023
 QUANTUM INFORMATION PROCESSING, SCI Journal, January 2023
 EUROPEAN PHYSICAL JOURNAL D, SCI Journal, January 2023
 FEW-BODY SYSTEMS, SCI Journal, January 2023
 AMERICAN JOURNAL OF PHYSICS, SCI Journal, January 2023
 CANADIAN JOURNAL OF PHYSICS, SCI Journal, January 2023
 FRONTIERS IN PHYSICS, SCI Journal, January 2023
 EPL, SCI Journal, July 2021
 PHYSICAL REVIEW X, SCI Journal, June 2021
 PHYSICAL REVIEW D, SCI Journal, May 2021
 JOURNAL OF LOW TEMPERATURE PHYSICS, SCI Journal, March 2021
 PHYSICS LETTERS A, SCI Journal, February 2021
 PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, National Scientific Refreed Journal, February 2021
 PHYSICAL REVIEW A, SCI Journal, February 2021
 TURKISH JOURNAL OF PHYSICS, National Scientific Refreed Journal, February 2021
 PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, SCI Journal, February 2021
 SAKARYA UNIVERSITY JOURNAL OF SCIENCE, National Scientific Refreed Journal, January 2021
 PHYSICAL REVIEW D, SCI Journal, July 2020
 JOURNAL OF LOW TEMPERATURE PHYSICS, SCI Journal, July 2020
 PHYSICAL REVIEW E, SCI Journal, May 2020
 CANADIAN JOURNAL OF PHYSICS, SCI Journal, April 2020
 EUROPEAN PHYSICAL JOURNAL C, SCI Journal, February 2020
 Chinesse Physics C, SCI Journal, December 2019
 Chaos, SCI Journal, December 2019
 Physical Review A, SCI Journal, October 2019
 European Physical Journal C, SCI Journal, October 2019
 Physical Review A, SCI Journal, September 2019
 Physica A, SCI Journal, September 2019
 Journal of Advances in Mathematics and Computer Science, Journal Indexed in ESCI, September 2019
 European Physical Journal C, SCI Journal, August 2019
 Physical Review D, SCI Journal, August 2019
 Quantum Information Processing, SCI Journal, July 2019
 Quantum Information Processing, SCI Journal, July 2019
 Physica A, SCI Journal, April 2019

Eurepean Physical Journal C, SCI Journal, April 2019
Quantum Information Processing, SCI Journal, March 2019
Eurepean Physical Journal C, SCI Journal, February 2019
Physical Review A, SCI Journal, November 2018
Quantum Information Processing, SCI Journal, November 2018
Quantum Information Processing, SCI Journal, November 2018
Physica A, SCI Journal, October 2018
Quantum Information Processing, SCI Journal, October 2018
Physica Scripta, SCI Journal, October 2018
Quantum Information Processing, SCI Journal, September 2018
PHYSICAL REVIEW D, SCI Journal, August 2018
PHYSICA A , SCI Journal, August 2018
NATURE, SCI Journal, June 2018
Phys Rev A, SCI Journal, June 2018
Quantum Inf. Procs., SCI Journal, May 2018
Canadian Journal of Physics, SCI Journal, November 2017
International Journal of Theoretical Physics, SCI Journal, November 2017
Quantum Information Processing, SCI Journal, November 2017
Quantum Information Processing, SCI Journal, November 2017
Canadian Journal of Physics, SCI Journal, November 2017
Elektrik Mühendisleri Odası Dergisi, National Scientific Refreed Journal, September 2017
PHYS REV A, SCI Journal, August 2017
Quantum Information Processing, SCI Journal, August 2017
Quantum Information Processing, SCI Journal, June 2017
PHYS REV A, SCI Journal, May 2017
Quantum Information Processing, SCI Journal, April 2017
Quantum Information Processing, SCI Journal, April 2017
Yerel Dergi, National Scientific Refreed Journal, March 2017
PHYSICAL REVIEW E, SCI Journal, February 2017
Quantum Information Processing, SCI Journal, January 2017
PHYSICAL REVIEW LETTERS, SCI Journal, September 2016
PHYS. REV E, SCI Journal, May 2016
JMMM, SCI Journal, September 2015
Turkish J. Physics, SCI Journal, March 2015
PHYS REV E, SCI Journal, March 2015
PYHS. REV A, SCI Journal, November 2014
Turkish Journal of Physics, Other Indexed Journal, August 2014
Physical Review A, SCI Journal, July 2014
Turkish Journal of Physics, Other Indexed Journal, May 2014
Balkan Physics Letters, Other Indexed Journal, April 2014
MEB - Ders Kitabı Değerlendirmesi, Scientific / Professional Book Published by Renowned Publishing Houses, April 2014
Balkan Physics Letters, Other Indexed Journal, March 2014
Physical Review E, SCI Journal, November 2013
Physical Review E, SCI Journal, June 2013
Ders Kitabı (MEB Talim Terbiye Kurulu), Scientific / Professional Book Published by Renowned Publishing Houses, June 2013
Physical Review E, SCI Journal, April 2013
Physical Review E, SCI Journal, March 2013
Physica Scripta, SCI Journal, October 2012
Physical Review Letters, SCI Journal, September 2012
Physical Review A, SCI Journal, April 2012

Physical Review Letters, SCI Journal, January 2012
Physica A, SCI Journal, August 2011
Physical Review Letters, SCI Journal, March 2011
Physical Review Letters, SCI Journal, January 2011
Physical Review E, SCI Journal, November 2010
Physical Review Letters, SCI Journal, June 2010
Physical Review A, SCI Journal, April 2010
Physical Review E, SCI Journal, February 2010
Physical Review Letters, SCI Journal, November 2009
Physical Review E, SCI Journal, May 2009

Tasks In Event Organizations

Aydiner E., Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, Scientific Congress, İstanbul, Turkey, Şubat 2021
Aydiner E., Yoğun Madde Fiziği Ankara-İstanbul-İzmir Toplantısı, Scientific Congress, Turkey, Aralık 2020
Aydiner E., High Energy Physics, Astrophysics & Cosmology, Workshop Organization, Turkey, Şubat 2020
Aydiner E., İstanbul Yoğun Madde Fiziği Toplantısı, Workshop Organization, Turkey, Haziran 2019
Aydiner E., Ulubay A., Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, Workshop Organization, Turkey, Ocak 2019
Aydiner E., Ulubay A., Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, Workshop Organization, Turkey, Şubat 2018
Aydiner E., Lineer Olmayan Sistemler, Kaos Teorisi ve Uygulamaları, Science / Art Camp or Summer School Organization, Turkey, Temmuz 2009
Aydiner E., Non-extensive Statistical Mechanics, Science / Art Camp or Summer School Organization, Turkey, Temmuz 2006
Aydiner E., İzmir Fizik Günleri, Scientific Congress, Turkey, Nisan 2005

Scientific Research / Working Group Memberships

İstanbul University Theoretical Physics Research Group, İSTANBUL ÜNİVERSİTESİ, Turkey, Yok, 2010 - Continues

Metrics

Publication: 77
Citation (WoS): 726
Citation (Scopus): 726
H-Index (WoS): 15
H-Index (Scopus): 15

Congress and Symposium Activities

YEFAK-2021: Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı, Moderator, İstanbul, Turkey, 2021
Ankara-İzmir-İstanbul Yoğun Madde Fiziği Toplantısı 25-26 Aralık 2020 Çevrimiçi, Session Moderator, İstanbul, Turkey, 2020
Quantum and Topological Thermodynamics workshop, Attendee, İstanbul, Turkey, 2019
Cyprus Gravity and Cosmology Conference 2019, Attendee, Girne, Cyprus (Kktc), 2019
3rd International Turkey-Iran Joint Conference on LHC Physics, Attendee, İstanbul, Turkey, 2019
İstanbul Yoğun Madde Fiziği Toplantısı 13-14 Nisan 2019 İstanbul, Attendee, İstanbul, Turkey, 2019
Karmaşık Sistemler ve Veri Bilimi Çalıştayı- Boğaziçi Üniversitesi, Attendee, İstanbul, Turkey, 2019
2. Nova Bilim ve Teknoloji Çalıştayı, Attendee, Bursa, Turkey, 2019

YEFAK-2019: Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2020, 3-5 Şubat 2020 İstanbul, Moderator, İstanbul, Turkey, 2019

YEFAK-2019: Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2019, 30-31 Ocak 2019 İstanbul, Attendee, İstanbul, Turkey, 2019

Ankara Yüksek Enerji Fiziği Günleri, 25-26 Ocak 2020 Ankara, Attendee, Ankara, Turkey, 2019

Kuantum Teknolojileri Çalıştayı, Attendee, Bolu, Turkey, 2019

Düzensiz Sistemler Çalıştayı 5-6 Ekim 2018 İstanbul, Attendee, İstanbul, Turkey, 2018

III. Yıldız Fizik Günleri, Yıldız Teknik Üniversitesi 10 Mayıs 2018 İstanbul, Attendee, İstanbul, Turkey, 2018

Karmaşık Sistemler ve Veri Bilimi Çalıştayı- Bilgi Üniversitesi 26 Mayıs 2018, Attendee, İstanbul, Turkey, 2018

YEFİST-2018 Yüksek Enerji Fiziği İstanbul Toplantısı, 27-28 Nisan 2018 Mimar Sinan GS Üni, Attendee, İstanbul, Turkey, 2018

YEFAK-2018: Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2018, 8-9 Şubat 2018 İstanbul, Attendee, İstanbul, Turkey, 2018

Yoğun Madde Fiziği İzmir Toplantısı, İYTE 13 Nisan 2018 İzmir, Attendee, İzmir, Turkey, 2018

Fifth Quantum Thermodynamics Conference, OXFORD UNIVERSITY, UK, Attendee, Oxford, United Kingdom, 2017

Kuantum Optiği ve Bilişim Toplantısı (KOBİT), İYTE İzmir, Attendee, İzmir, Turkey, 2017

CERN FCC Physics Workshop, Geneva, SWISS, Attendee, Genève, Switzerland, 2017

5th International Conference on Mathematical Modeling in Physical Sciences, Athen (Atina) Greece, Attendee, Athína, Greece, 2016

Balkan Fizik Kongresi, Attendee, İstanbul, Turkey, 2015

TFD-21, Attendee, Turkey, 2014

İstatistik Fizik Günleri, Attendee, Turkey, 2005

İstatistik Fizik Günleri, Attendee, Turkey, 2003

İstatistik Fizik Günleri, Attendee, Turkey, 2002

İstatistik Fizik Günleri, Attendee, Turkey, 2000

İstatistik Fizik Günleri, Attendee, İstanbul, Turkey, 1999

Türk Fizik Derneği 17. Fizik Kongresi, Attendee, Turkey, 1998

İstatistik Fizik Günleri, Attendee, Turkey, 1998

Workshop on Interface Dynamics, Attendee, Turkey, 1998

İstatistik Fizik Günleri, Attendee, Turkey, 1997

İstatistik Fizik Günleri, Attendee, Turkey, 1996

Invited Talks

Üç Cisim Problemi (Özgen Berkol Doğan Bilim Kurgu Kütüphanesi), Conference, Özgen Berkol Doğan Bilim Kurgu Kütüphanesi, Turkey, April 2024

Kaotik Evren Teorisi ve Fizikte Yeni Yasalar (Yıldız Teknik Üniversitesi), Conference, Yıldız Teknik Üniversitesi, Turkey, December 2023

Karanlık Madde ve Karadelikler, Conference, Çağaloğlu Anadolu Lisesi, Turkey, December 2023

Kaotik Evren Teorisi ve Fizikte Yeni Yasalar, Conference, Hitit Üniversitesi, Turkey, November 2023

Ben neler yapıyorum? (Q-Turkey), Conference, Mimar Sinan Güzel Sanatlar Üniversitesi, Turkey, November 2023

Kaotik Evren Teorisi (Samiha Ayverdi Anadolu Lisesi), Conference, Kaotik Evren Teorisi (Samiha Ayverdi Anadolu Lisesi), Turkey, March 2023

Gelir Dağılımının İstatistik Mekanik Modeli (Grup Semineri, Fizik Bölümü), Seminar, İstanbul Üniversitesi, Turkey, January 2023

Evrenin Kozmik Evrimi (Numune-i Terakki - İstanbul Erkek Lisesi), Conference, Numune-i Terakki - İstanbul Erkek Lisesi, Turkey, January 2023

Kaotik Evren Teorisi (Gebze Teknik Üniversitesi), Conference, Gebze Teknik Üniversitesi, Turkey, December 2022

Chaotic Universe Theory (Potsdam University), Seminar, Germany, November 2022

Kozmolojide yeni adım (Çağaloğlu Anadolu Lisesi Fizik Kulübü Semineri), Seminar, Kaotik Evren Teorisi (Kozmolojide

yeni adim (Cağaloğlu Anadolu Lisesi Fizik Kulübü Semineri), Turkey, October 2022

Bose-Einstein Yoğuşma Fazında İtici Casimir Kuvveti (İstanbul Yoğun madde Fiziği Toplantısı), Workshop, İstanbul Üniversitesi, Turkey, September 2022

Ben Neler Yapıyorum? (Ekim 2022 Bölüm tercihi için gelen öğrencilere yönelik konuşma), Conference, İstanbul Üniversitesi, Turkey, September 2022

Toward to a new physics (Opening talk in the Frontiers of Fundamental Physics), Conference, Frontiers of Fundamental Physics, Turkey, May 2022

Kaotik Evren Teorisi ve Yeni Bulgular (İstanbul Üniversitesi), Conference, İstanbul Üniversitesi, Turkey, March 2022

Evrenin Sonu (İstanbul Üniversitesi Fizik Kulübü), Conference, İstanbul Üniversitesi, Turkey, May 2021

Kozmolojinin Önemli Problemleri ve Kaotik Evren Teorisi (Selçuk Üniversitesi), Seminar, Selçuk Üniversitesi, Turkey, April 2021

Matematiksel.org, Konuk: Ekrem Aydınır Link: <https://www.instagram.com/p/CH3SBBRA9bi/?igshid=1w73pa6xb940m&fbclid=IwAR0uoYVifbgJFsNV4llEkDCOh8nf1MD1czwlxw1104f6RFsHqp0ueYKZp3E>, Seminar,

Matematiksel, Turkey, November 2020
"Kompleks ve Kaotik İktisat Sürecinde Öngörülebilir Düzene Bir Örnek" 28 Nisan 2020, Yıldız Teknik Üniversitesi İktisadi ve İdari Bilimler Fakültesi, Conference, "Kompleks ve Kaotik İktisat Sürecinde Öngörülebilir Düzene Bir Örnek" 28 Nisan 2020, Yıldız Teknik Üniversitesi İktisadi ve İdari Bilimler Fakültesi, Turkey, April 2020

The emergence of the Universe and Its evolution, Workshop, Çanakkale Onsekiz Mart Üniversitesi, Turkey, April 2020

The emergence of the Universe and Its evolution, Seminar, Üsküdar Üniversitesi, Turkey, March 2020

The emergence of the Universe and Its evolution, Yıldız Teknik Üniversitesi, Conference, Yıldız Teknik Üniversitesi, Turkey, March 2020

The emergence of the Universe and Its evolution, İstanbul Üniversitesi Fizik Öğrenci Çalıştayı, Workshop, İstanbul Üniversitesi, Turkey, February 2020

Why is a new cosmology theory necessary? (Orta Doğu Teknik Üniversitesi), Workshop, Orta Doğu Teknik Üniversitesi, Turkey, February 2020

"Kaotik Evren Teorisi" İstanbul Erkek Lisesi, 13 Ocak 2020 İstanbul, Conference, "Kaotik Evren Teorisi" İstanbul Erkek Lisesi, 13 Ocak 2020 İstanbul, Turkey, January 2020

"Yeni bir kozmoloji teorisi neden gerekli?" 25 - 26 Ocak 2020 ODTÜ Fizik Bölümü Ankara, Workshop, "Yeni bir kozmoloji teorisi neden gerekli?" 25 - 26 Ocak 2020 ODTÜ Fizik Bölümü Ankara, Turkey, January 2020

Chaotic Universe Theory, Germany, Seminar, "Chaotic Universe Theory", Germany, Turkey, December 2019

"Kaotik Evren Teorisi" İstanbul Üniversitesi, İstanbul, Conference, "Kaotik Evren Teorisi" İstanbul Üniversitesi, İstanbul, Turkey, November 2019

"Kaotik Evren Teorisi" Çukurova Üniversitesi - Adana, Conference, "Kaotik Evren Teorisi" Çukurova Üniversitesi - Adana, Turkey, November 2019

"Evrenin Oluşumu ve Evrimi" Adana Fen Lisesi - Adana, Conference, "Evrenin Oluşumu ve Evrimi" Adana Fen Lisesi - Adana, Turkey, November 2019

Quantum Entanglement in Cosmology, İstanbul Teknik Üniversitesi, Conference, İstanbul Teknik Üniversitesi, Turkey, June 2019

Theory. 3rd International Turkey-Iran Joint Conference on LHC Physics, Conference, Chaotic Universe Theory. 3rd International Turkey-Iran Joint Conference on LHC Physics, Turkey, June 2019

Kaotik Evren Teorisi, İÜ web tv, Conference, İstanbul Üniversitesi, Turkey, May 2019

Kompleks Sistemler Fizik Yasalarına Uyar mı?, Conference, Kompleks Sistemler Fizik Yasalarına Uyar mı? Kompleks Sistemler ve Veri Bilimi Çalıştayı 4 Mayıs 2019 Boğaziçi Üniversitesi, Turkey, May 2019

Yoğun madde fiziğinden ekonomi fiziğine: Gelir dağılımının modellenmesi, Boğaziçi Üniversitesi, Conference, Boğaziçi Üniversitesi, Turkey, May 2019

Karadelikler, Haber Türk TV, Conference, Haber Türk Fatih Altaylı ile Teke Tek Programı Video:

<https://www.youtube.com/watch?v=sIb1YmPeJrc&t=367s>, Turkey, May 2019

Yeni Fizik Arayışı: Kaotik Evren Teorisi, Conference, Chaotic Universe Theory, Doğu Akdeniz Üniversitesi, KKTC, Turkey, April 2019

Evrenin Evrimi, Conference, Evrenin Evrimi- 2. Nova Bilim ve Teknoloji Sempozyumu 5 Nisan 2019, Turkey, April 2019

Kuantum Fiziği ve Kuantum Teknolojileri, Conference, Kuantum Fiziği ve Kuantum Teknolojileri, Araştırma Kültür Vakfı,

Ankara, Turkey, January 2019

Bose-Einstein Fazında İtici Casimir Etkisi, Conference, Bose-Einstein Fazında İtici Casimir Etkisi, Kuantum Teknolojileri Çalıştayı, Koç ve İzzet Baysal Üniversitesi, Bolu, Turkey, January 2019

KAOTİK EVREN MODELİ, Conference, KAOTİK EVREN MODELİ, EVRİM AĞACI YOUTUBE KANALI 24 Kasım 2018

<https://www.youtube.com/watch?v=ik4cCBcq0qo>, Turkey, November 2018

Kozmolojinin derin problemleri ve Kaotik Evren Teorisi - The deep problem of the cosmology and chaotic universe theory, Conference, Kozmolojinin derin problemleri ve Kaotik Evren Teorisi - The deep problems of the cosmology and chaotic universe theory -- Disordered System Symposym , Turkey, October 2018

Veri Biliminde Karmaşıklık Fiziği, Workshop, Veri Biliminde Karmaşıklık Fiziği, Karmaşık Sistemler ve Veri Bilimi Çalıştayı- Bilgi Üniversitesi 26 Mayıs 2018, Turkey, May 2018

Parçacık Fiziği ve Kozmoloji, Conference, Ekrem Aydın'ın Kaotik Evren Modeli: Parçacık Fiziği ve Kozmoloji Bağlamında Tartışmalar, II. Yıldız Fizik Günleri, Yıldız Teknik Üniversitesi İstanbul 10-11 Mayıs 2018 , Turkey, May 2018

Magnetik Nanoparçacıkların Relaksasyon Dinamiği, İzmir Yüksek Teknoloji Enstitüsü, Workshop, İzmir Yüksek Teknoloji Enstitüsü, Turkey, April 2018

Kaotik evren modeli, Conference, Kaotik evren modeli, Yüksek Enerji Fiziği İstanbul Toplantısı (YEFİST2018), Mimar Sinan Güzel Sanatlar Üniversitesi İstanbul 27-28 Nisan 2018 , Turkey, April 2018

Kaotik evren modeli, Conference, Kaotik evren modeli. YEFİST 2018 İstanbul Ü. 8-9 Şubat 2018. Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı , Turkey, February 2018

Kaotik Evren Modeli, Conference, Kaotik Evren Modeli (Özgen Berkol Doğan Kütüphanesi) Video:

<https://www.youtube.com/watch?v=6dZH4hDV24Q&fbclid=IwAR2HNmrT5t36yskrCqzCvw16DGCdh3oY27m5Fwuja6WfHmU7if6JP7yw4A>, Turkey,

February 2018

Evren hakkında bildiklerimiz - İELEV 10 Ocak 2018, Conference, Evren hakkında bildiklerimiz - İELEV 10 Ocak 2018, Turkey, January 2018

Klasik ve Kuantum Bilgisayarlar Beşiktaş Anadolu Lisesi, Conference, Klasik ve Kuantum Bilgisayarlar - Beşiktaş Anadolu Lisesi, Turkey, December 2017

Evrenin Kısa Tarihi - Mektebim Okulları Atakent Kampusu, Conference, Evrenin Kısa Tarihi - Mektebim Okulları Atakent Kampusu, Turkey, November 2017

Evrenin Fraktal Yapısı ve Kaotik Dinamiği, Bursa Gökyüzü Gözlem Şenliği, Conference, Evrenin Fraktal Yapısı ve Kaotik Dinamiği - Bursa Gökyüzü Gözlem Şenliği, Turkey, September 2017

Kuantum Bilgi Teknolojileri, Conference, Kuantum Bilgi Teknolojileri (Nova bilim ve teknoloji günleri) Bursa, Turkey, September 2017

Mikro ve Makro Evrende Kısa bir Yolculuk, Conference, Mikro ve Makro Evrende Kısa bir Yolculuk (İELEV, 125. Yıl), Turkey, June 2017

Evrenin Keşif, Conference, Evreni Keşif - İELEV, Cağaloğlu, Turkey, June 2017

Kaotik Evren Modeli, Conference, Kaotik Evren Modeli - İstanbul Uni Fizik Bölümü, Turkey, May 2017

Gelir Dağılımı, Pareto Yasası ve Açık Ekonomik Sistemler, İstanbul Teknik Üniversitesi, Conference, İstanbul Teknik Üniversitesi, Turkey, April 2017

Ajan tabanlı modeller, Pareto yasası, paranın zaman içinde evrimi, Tobb Ekonomi ve Teknoloji Üniversitesi, Conference, Tobb Ekonomi Ve Teknoloji Üniversitesi, Turkey, November 2016

Özgen Berkol Doğan Kütüphanesi, Conference, Karmaşıklık, Kaos ve Evrenin Dinamik Düzeni (Özgen Berkol Doğan Kütüphanesi) İstanbul, Turkey, November 2016

Kuantum faz geçişleri: Kuantum kritik fenomenler. , Conference, Kuantum faz geçişleri: Kuantum kritik fenomenler. Dokuz Eylül Ü. İzmir, Turkey, May 2016

Marmara Üniversitesi, Conference, Maddenin Kuantum Halleri: Kuantum dolanıktan sicim teorisine - Marmara Üniversitesi, İstanbul, Turkey, May 2016

Kuantum fiziği nedir? Ne işe yarar?, Conference, Kuantum fiziği nedir? Ne işe yarar? Beşiktaş Anadolu Lisesi, İstanbul, Turkey, May 2016

Evrenin Orijini ve Dinamiği, Conference, Evrenin Orijini ve Dinamiğinin İrdelenmesi - Yıldız Teknik Üni. İstanbul, Turkey, April 2016

Evrenin dinamiği, Conference, Fraktal Evren. İstanbul Ü. Amatör Astronomlar Klübü, İstanbul Üniversitesi, Turkey, March

2016

Evrenin oluşumu, tarihi ve evrimi, Conference, Evrenin Evrimi. İstanbul, Turkey, January 2014

Kozmik evrimden biyolojik sistemlerin evrimine., Conference, Kozmik evrimden biyolojik sistemlerin evrimine. İstanbul, Turkey, January 2014

Fizik yasaları, simetri, temel kuvvetler, düzen, simetri kırılması, karmaşa, evrim, kompleks sistemler, Conference, Fizik yasaları, simetri, temel kuvvetler, düzen, simetri kırılması, karmaşa, evrim, kompleks sistemler, İstanbul Üniversitesi Amatör Astronomlar Topluluğu, İstanbul, Turkey, January 2014

Yoğunluk Matrisi Renormalizasyon Grup yöntemi, Conference, DMRG ile Kuantum Dolanıklık Hesabı, Akdeniz Üniversitesi, Antalya, Turkey, May 2013

Arkeolojiden Zoolojiye Bilimde Güncel Konular, Conference, Turkey, May 2011

Arkeolojiden Zoolojiye Bilimde Güncel Konular, Conference, Arkeolojiden Zoolojiye Bilimde Güncel Konular, Akdeniz Ü, Antalya, Turkey, April 2011

Arkeolojiden Zoolojiye Bilimde Güncel Problemler, Conference, Arkeolojiden Zoolojiye Bilimde Güncel Problemler, Mersin Ü Bilim Şenliği, Mersin, Turkey, February 2010

Voltaj-kapılı iyon kanallarının İstatistik Mekanik modeli, Conference, İYTE (Voltaj-kapılı iyon kanallarının İstatistik Mekanik modeli), Turkey, May 2009

Kaos Teorisi ve Fraktal Geometri, Conference, Kaos Teorisi ve Fraktal Geometri. Dokuz Eylül Ü. 6. Eğitim Çalıştayı, İzmir, Turkey, April 2007

2006 Yılınna kadar 300 den fazla seminer, konuşma vs... , Conference, 2006 Yılına kadar 300 den fazla seminer, konuşma vs... , Turkey, February 2006

Scholarships

DAAD Awards, Humboldt Program, 2022 - 2022

YÖK Bilimsel Ziyaretçi Destek Bursu, YOK, 2011 - 2011

Awards

Aydiner E., Sedat Simavi Ödülü, Türkiye Gazeteciler Cemiyeti, December 2019

Non Academic Experience

İstanbul Uni

Middlesex University

Leeds University

Dokuz Eylül Uni

Çukurova Uni