



## Prof. Ekrem AYDINER

### Personal Information

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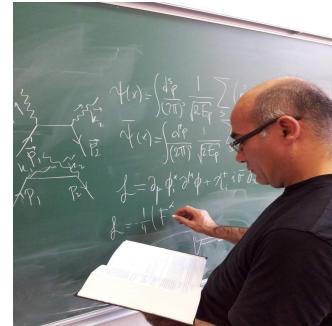
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**Address:** İstanbul Üniversitesi Fen Fakültesi Fizik Bölümü Vezneciler İstanbul



### 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, Princeton University, Fizik Bölümü, 2025 - Continues  
Professor, Koc University, Fen Fakültesi, Fizik Bölümü, 2024 - Continues  
Professor, Istanbul University, Faculty of Science, Department of Physics, 2014 - Continues  
Professor, Humboldt-Universitaet zu Berlin, Institute of Physik, 2022 - 2022  
Professor, Universitaet Potsdam, Institute of Physik / Theoretical Physics, 2022 - 2022  
Professor, Istanbul Yeni Yuzyil University, Mimarlik Ve Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisligi, 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 Gursey 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  
Akişkanlar 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., Uzay-zaman geometrileri, Postgraduate, A.Candan(Student), Continues

Aydiner E., FLRW uzay-zamanda nötrino Osilasyonu, Doctorate, H.Abdolalizadeh(Student), Continues  
Aydiner E., Karanlık madde ve karanlık enerji arasındaki kaotik etkileşimlerin incelenmesi, Postgraduate,  
S.Önder(Student), 2024

Aydiner E., Karanlık madde ve karanlık enerji etkileşimlerinin incelenmesi, Postgraduate, H.Başer(Student), 2024

Aydiner E., Karanlık madde ve karanlık enerji etkileşim dinamiğinin kaos analizi, Postgraduate, Ö.Kartal(Student), 2024

Aydiner E., Covid-19 dinamiğinin modellenmesi: Kaos analizi ve dağılm fonksiyonunun incelenmesi, Doctorate,  
E.Yılmaz(Student), 2024

Aydiner E., Postgraduate, Y.Alsham(Student), 2022

Aydiner E., Yüksek Boyutlu Lotka-Volterra Tipindeki Bağlaçlı 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.Gönülol(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., Kuantum bilgi entropisi, Postgraduate, C.Orta(Student), 2006

Aydiner E., Yerkürenin magnetik kutup salınımının modellenmesi, Postgraduate, M.Altürk(Student), 2006

Aydiner E., Sosyal ve politik olayların modellenmesi, Postgraduate, M.Gönülol(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 Final Üniversitesi, November, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, İzmir  
Yükse 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  
Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Uluslararası Final Üniversitesi, September, 2020  
Doctorate, Doctorate, İstanbul 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, İstanbul Üni, October, 2016  
Associate Professor Exam, Sinav, YOK, December, 2015  
Associate Professor Exam, Sinav, YOK, December, 2015  
Associate Professor Exam, Doçentlik Sınav Jürisi, YÖK, November, 2015  
Associate Professor Exam, Doçentlik Dinav Jürisi, YÖK, November, 2015  
Associate Professor Exam, Jüri, YÖK, October, 2015  
Associate Professor Exam, doçentlik sınavı, 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, Dokuz Eylül Üniversitesi (Yusuf Yüksel), March, 2013  
Doctorate, Tez Savunma Jürisi, İstanbul Üniversitesi (Sercan Şen), March, 2013  
Doctorate, Tez Savunma Sınavı, Dokuz Eylül Üniversitesi (Ebru Kış-Çam), June, 2012  
Doctorate, Tez Savunma Jürisi, İstanbul Üniversitesi (Neslihan Üzar), June, 2012  
Competition, Liselerarası proje yarışması, Okyanus Koleji, April, 2012  
Doctorate, Tez Savunma Jürisi, Dokuz Eylül Üniversitesi (Meltem Gönülol), 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 Gonülol), 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. Chaotic interactions between dark matter and dark energy

Aydiner E.

arXiv, vol.1, no.1, pp.1-10, 2024 (SCI-Expanded)

### II. Chaotic Interaction between Thermodynamic Systems

Aydiner E.

Preprint, vol.1, no.1, pp.1-10, 2024 (SCI-Expanded)

### III. Exponential correction to Friedmann equations

Okcu O., AYDINER E.

GENERAL RELATIVITY AND GRAVITATION, vol.56, no.7, 2024 (SCI-Expanded)

### IV. Chaotic and Quasi-periodic Regimes in the Covid-19 Mortality Data

Yilmaz E., Aydiner E.

Chaos Theory and Applications, vol.1, no.1, pp.1-10, 2024 (SCI-Expanded)

### V. Quantum entanglement between neutrino eigenstates in the presence of the subsequent phase shift of the neutrino oscillations

Abdolalizadeh H., AYDINER E.

EPL, vol.146, no.5, 2024 (SCI-Expanded)

### VI. Matter, Dark Matter, Dark Energy Interactions and New Physics

Aydiner E.

SPRINGER PROCEEDINGS IN PHYSICS, vol.1, no.1, pp.1-10, 2024 (SCI-Expanded)

### VII. Superposition and interference states in q-deformed quantum oscillator

Alomeare H., NUTKU F., AYDINER E.

European Physical Journal D, vol.78, no.5, 2024 (SCI-Expanded)

### VIII. Universal behavior of the Covid-19 tails: Inverse power-law distribution

Aydiner E., Yilmaz E.

arXiv, vol.1, no.1, pp.1-10, 2024 (SCI-Expanded)

### IX. Anomalous transport of the ion-channels

Aydiner E.

CANADIAN JOURNAL OF PHYSICS, vol.1, no.1, pp.1-9, 2024 (SCI-Expanded)

### X. 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)

### XI. Modified Friedmann equations from fractional entropy

Çoker Z., Ökcü Ö., Aydiner E.

EPL, vol.143, no.5, 2023 (SCI-Expanded)

### XII. 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)
- XIII. **Anomalous Cyclic in the Neutrino Oscillations**  
Aydiner E.  
SCIENTIFIC REPORTS, vol.1, no.1, pp.1-11, 2023 (SCI-Expanded)
- XIV. **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)
- XV. **Investigating bounds on the extended uncertainty principle metric through astrophysical tests**  
Ökcü Ö., Aydiner E.  
EPL, vol.138, no.3, 2022 (SCI-Expanded)
- XVI. **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)
- XVII. **Late time transition of Universe and the hybrid scale factor**  
Aydiner E., Başaran-Öz I., Dereli D. T., Sarışaman M.  
European Physical Journal C, vol.82, no.39, pp.1-15, 2022 (SCI-Expanded)
- XVIII. **Time-fractional kinetic equation for the non-equilibrium processes**  
Aydiner E.  
Scientific Reports, vol.1, no.1, pp.1-11, 2021 (SCI-Expanded)
- XIX. **Space-fractional quantum heat engine based on level degeneracy**  
Aydiner E.  
SCIENTIFIC REPORTS, vol.1, no.1, pp.1-8, 2021 (SCI-Expanded)
- XX. **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)
- XXI. **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)
- XXII. **Quantum Szilard engine for the fractional power-law potentials**  
Aydiner E.  
SCIENTIFIC REPORTS, vol.11, no.1, 2021 (SCI-Expanded)
- XXIII. **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)
- XXIV. **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)
- XXV. **Modified Friedmann equations from DSR-GUP**  
Okcu O., Corda C., AYDINER E.  
EPL, vol.129, no.5, 2020 (SCI-Expanded)
- XXVI. **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)
- XXVII. **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)
- XXVIII. **Particle Creation in Friedmann-Robertson-Walker Universe**  
Sevinç Ö., Aydiner E.

- GRAVITATION & COSMOLOGY, vol.25, pp.397-406, 2019 (SCI-Expanded)
- XXIX. 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)
- XXX. 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)
- XXXI. 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)
- XXXII. Joule-Thomson expansion of Kerr-AdS black holes**  
 Ökcü Ö., Aydiner E.  
 EUROPEAN PHYSICAL JOURNAL C, vol.78, 2018 (SCI-Expanded)
- XXXIII. 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)
- XXXIV. Wealth distribution, Pareto law, and stretched exponential decay of money: Computer simulations analysis of agent-based models**  
 Aydiner E., Cherstvy A. G., Metzler R.  
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- I. **Quadratic interaction effect on the dark energy density in the universe**  
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- AYDINER E., SARISAMAN M., BAŞARAN ÖZ I., DERELİ T., Project Supported by Higher Education Institutions, Kaotik Evren Teorisinin Metrik Bağımlı 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 Dinamiği: XY Spin Modelleri, 2012 - 2020
- AYDINER E., Project Supported by Higher Education Institutions, Ekonofizik Modellerin Geliştirilmesi, 2018 - 2018
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## **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
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Turkish Journal of Physics, Other Indexed Journal, August 2014  
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## 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

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## 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

Cyprus Gravity and Cosmology Conference 2019, Attendee, Girne, Cyprus (Kktc), 2019

Quantum and Topological Thermodynamics workshop, Attendee, İstanbul, Turkey, 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

2. Nova Bilim ve Teknoloji Çalıştayı, Attendee, Bursa, Turkey, 2019

Karmaşık Sistemler ve Veri Bilimi Çalıştayı- Boğaziçi Üniversitesi, Attendee, İstanbul, 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  
Yoğun Madde Fiziği İzmir Toplantısı, İYTE 13 Nisan 2018 İzmir, Attendee, İzmir, Turkey, 2018  
YEFAK-2018: Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2018, 8-9 Şubat 2018 İstanbul, Attendee, İstanbul, 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, Genevo, 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  
Istatistik Fizik Günleri, Attendee, Turkey, 2005  
Istatistik Fizik Günleri, Attendee, Turkey, 2003  
Istatistik Fizik Günleri, Attendee, Turkey, 2002  
Istatistik Fizik Günleri, Attendee, Turkey, 2000  
Istatistik Fizik Günleri, Attendee, İstanbul, Turkey, 1999  
Türk Fizik Derneği 17. Fizik Kongresi, Attendee, Turkey, 1998  
Istatistik Fizik Günleri, Attendee, Turkey, 1998  
Workshop on Interface Dynamics, Attendee, Turkey, 1998  
Istatistik Fizik Günleri, Attendee, Turkey, 1997  
Istatistik Fizik Günleri, Attendee, Turkey, 1996

## Invited Talks

A new interaction schema for the coupled thermodynamical systems (Koç Üniversitesi), Seminar, Koç Üniversitesi, Turkey, November 2024  
Kaotik Evren Teorisi ve Fizikte Yeni Yasalar (İstanbul Üniversitesi), Seminar, İstanbul Üniversitesi, Turkey, November 2024  
Kaotik Evren Teorisi ve Yeni Fizik (Mersin Üniversitesi), Conference, Mersin Üniversitesi, Turkey, May 2024  
Fizikte Yeni Kavramlar, Tanımlar ve Yasalar (Çukurova Üniversitesi), Conference, Çukurova Üniversitesi, Turkey, May 2024  
Üç Cisim Problemi (Özgen Berkol Doğan Bilim Kurgu Kütüphanesi), Conference, Özgen Berkol Doğan Bilim Kurgu Kütüphanesi, Turkey, April 2024  
Karanlık Madde ve Karadelikler (Cağaloğlu Anadolu Lisesi), Conference, Cağaloğlu Anadolu Lisesi, Turkey, December 2023  
Kaotik Evren Teorisi ve Fizikte Yeni Yasalar (Yıldız Teknik Üniversitesi), Conference, Yıldız Teknik Üniversitesi, Turkey, December 2023  
Ben neler yapıyorum? (Q-Turkey), Conference, Mimar Sinan Güzel Sanatlar Üniversitesi, Turkey, November 2023  
Kaotik Evren Teorisi ve Fizikte Yeni Yasalar (Hitit Üniversitesi), Conference, Hitit Üniversitesi, Turkey, November 2023  
Kaotik Evren Teorisi (Samiha Ayverdi Anadolu Lisesi), Conference, Kaotik Evren Teorisi (Samiha Ayverdi Anadolu Lisesi), Turkey, March 2023  
Evrenin Kozmik Evrimi (Numune-i Terakki - İstanbul Erkek Lisesi), Conference, Numune-i Terakki - İstanbul Erkek Lisesi, Turkey, January 2023  
Gelir Dağılımının İstatistik Mekanik Modeli (Grup Semineri, Fizik Bölümü), Seminar, İstanbul Üniversitesi, 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 adim (Cağaloğlu Anadolu Lisesi Fizik Kulübü Semineri), Seminar, Kaotik Evren Teorisi (Kozmolojide yeni adim (Cağaloğlu Anadolu Lisesi Fizik Kulübü Semineri), Turkey, October 2022

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

Bose-Einstein Yoğunlaşma Fazında İtici Casimir Kuvveti (İstanbul Yoğun madde Fiziği Toplantısı), Workshop, 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 Aydiner Link: <https://www.instagram.com/p/CH3SBBra9bi/>

igshid=1w73pa6xb940m&fbclid=IwAR0uoYVifbgJFsNV4llEkDCOh8nf1MD1czwlxw11O4f6RFsHqp0ueYKZp3E, Seminar, Matematiksel, Turkey, November 2020

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

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

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

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

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

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

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

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

Yoğun madde fizигinden ekonomi fizигine: Gelir dagiliminin modellenmesi, Boğaziçi Üniversitesi, Conference, Boğaziçi Üniversitesi, Turkey, May 2019

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

Kaotik Evren Teorisi, İÜ web tv, Conference, İstanbul 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

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

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

April 2019

Kuantum Fizги ve KuantumTeknolojileri, Conference, Kuantum Fizги ve KuantumTeknolojileri, 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

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

Veri Biliminde Karmaşıklığın Fiziksel Doğası, Workshop, Veri Biliminde Karmaşıklığın Fiziksel Doğası . Karmaşık Sistemler ve Veri Bilimi Çalıştayı- Bilgi Üniversitesi 26 Mayıs 2018, Turkey, May 2018

Kaotik evrem modeli, Conference, Kaotik evren modeli, Yüksek Enerji Fiziği İstanbul Toplantısı (YEKİST2018), Mimar Sinan Güzel Sanatlar Üniversitesi İstanbul 27-28 Nisan 2018 , Turkey, April 2018

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

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

<https://www.youtube.com/watch?v=6dZ4hDV24Q&fbclid=IwAR2HNmrT5t36yskrCqzCvw16DGCdh3oY27m5Fwuja6WfHmU7if6JP7yw4A>, Turkey,

February 2018

Kaotik evren modeli, Conference, Kaotik evren modeli. YEFAK 2018 İstanbul Ü. 8-9 Şubat 2018. Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı , 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 Kampüsü, Conference, Evrenin Kısa Tarihi - Mektebim Okulları Atakent Kampüsü, 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

Everenin 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

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

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

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

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

Marmara Üniversitesi, Conference, Maddenin Kuantum Halleri: Kuantum dolanıktan sicim teorisine - Marmara Üniversitesi, 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

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

Evrenin oluşumu, tarihi ve evrimi, Conference, Evrenin Evrimi. 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 Gümcel Problemler, Conference, Arkeolojiden Zoolojiye Bilimde Gümcel 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 Yılına 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