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Kişisel Bilgiler

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Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: GHZ-1377-2022

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Yoksis Araştırmacı ID: 397384

Eğitim Bilgileri

Bütünleşik Doktora, University of Massachusetts Amherst, College of Natural Sciences, Department of Physics, Amerika Birleşik Devletleri 2007 - 2012

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye 2005 - 2007

Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye 2002 - 2005

Yabancı Diller

İsveççe, A1 Başlangıç

Çince, A1 Başlangıç

İngilizce, C2 Ustalık

Yaptığı Tezler

Bütünleşik Doktora, Topics in High Energy Physics Beyond the Standard Model, University of Massachusetts Amherst, College of Natural Sciences, Department of Physics, 2012

Yüksek Lisans, Strong decays of the $D_s J(2317)$ mesons using QCD sum rules, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2007

Araştırma Alanları

Fizik, Yüksek Enerji Fiziği, Teorik Yüksek Enerji Fiziği Çalışmaları, Teorik Nötrino Çalışmaları, Nötrino Salınımları, Genel relativite ve gravitasyon, İstatistik fizik, termodinamik ve nonlineer dinamik sistemler, Kuantum mekaniği, alan teorileri ve özel relativite

Akademik Unvanlar / Görevler

Araştırmacı, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2022 - Devam Ediyor

Araştırmacı, Institute of High Energy Physics (IHEP)- Beijing, Theoretical Physics, 2019 - 2022

Arařtırmacı, Huazhong University of Science and Technology, Department of Phsics, 2017 - 2019
Arařtırmacı, Uppsala Universitet (Uppsala University), Department of Physics and Astronomy, 2013 - 2016
Arařtırmacı, Virginia Polytechnic Institute and State University, Department of Physics, 2012 - 2013
Arařtırma Grevlisi, University of Massachusetts Amherst, Department of Physics, 2007 - 2012
Arařtırma Grevlisi, Orta Doęu Teknik niversitesi, Fen Edebiyat Fakltesi, Fizik Blm, 2005 - 2007

Verdięi Dersler

General Relativity, Lisans, 2022 - 2023

Speical Relativity, Lisans, 2022 - 2023

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **On thermodynamics of compact objects**
Aydemir U., Ren J.
CLASSICAL AND QUANTUM GRAVITY, cilt.40, sa.18, ss.1-24, 2023 (SCI-Expanded)
- II. **Dark sector production and baryogenesis from not quite black holes ***
AYDEMİR U., Ren J.
CHINESE PHYSICS C, cilt.45, sa.7, 2021 (SCI-Expanded)
- III. **Not quite black holes as dark matter**
AYDEMİR U., Holdom B., Ren J.
PHYSICAL REVIEW D, cilt.102, sa.2, 2020 (SCI-Expanded)
- IV. **Addressing the R-D(*) anomalies with an S-1 leptoquark from SO(10) grand unification**
AYDEMİR U., Mandal T., Mitra S.
PHYSICAL REVIEW D, cilt.101, sa.1, 2020 (SCI-Expanded)
- V. **Clifford-based spectral action and renormalization group analysis of the gauge couplings**
AYDEMİR U.
EUROPEAN PHYSICAL JOURNAL C, cilt.79, sa.4, 2019 (SCI-Expanded)
- VI. **B-decay anomalies and scalar leptoquarks in unified Pati-Salam models from noncommutative geometry**
AYDEMİR U., Minic D., Sun C., Takeuchi T.
JOURNAL OF HIGH ENERGY PHYSICS, cilt.2018, sa.9, 2018 (SCI-Expanded)
- VII. **A Scale at 10 MeV, Gravitational Topological Vacuum, and Large Extra Dimensions**
AYDEMİR U.
UNIVERSE, cilt.4, sa.7, 2018 (SCI-Expanded)
- VIII. **LHC Probes of TeV-Scale Scalars in SO(10) Grand Unification**
AYDEMİR U., Mandal T.
ADVANCES IN HIGH ENERGY PHYSICS, cilt.2017, 2017 (SCI-Expanded)
- IX. **The 750 GeV diphoton excess in unified SU(2)(L) x SU(2)(R) x SU(4) models from noncommutative geometry**
Aydemir U., Minic D., Sun C., Takeuchi T.
MODERN PHYSICS LETTERS A, cilt.31, sa.18, 2016 (SCI-Expanded)
- X. **SO(10) grand unification in light of recent LHC searches and colored scalars at the TeV-scale**
AYDEMİR U.
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.31, sa.8, 2016 (SCI-Expanded)
- XI. **Pati-Salam unification from noncommutative geometry and the TeV-scale W-R boson**
AYDEMİR U., Minic D., Sun C., Takeuchi T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.31, sa.1, 2016 (SCI-Expanded)
- XII. **Higgs mass, superconnections, and the TeV-scale left-right symmetric model**

AYDEMİR U., Minic D., Sun C., Takeuchi T.

PHYSICAL REVIEW D, cilt.91, sa.4, 2015 (SCI-Expanded)

XIII. The Higgs mass and the emergence of new physics

AYDEMİR U., Minic D., Takeuchi T.

PHYSICS LETTERS B, cilt.724, sa.4-5, ss.301-305, 2013 (SCI-Expanded)

XIV. Self-healing of unitarity in effective field theories and the onset of new physics

AYDEMİR U., Anber M. M., Donoghue J. F.

PHYSICAL REVIEW D, cilt.86, sa.1, 2012 (SCI-Expanded)

XV. Dynamical four-form fields

AYDEMİR U., Grisa L., Sorbo L.

PHYSICAL REVIEW D, cilt.83, sa.6, 2011 (SCI-Expanded)

XVI. Breaking diffeomorphism invariance and tests for the emergence of gravity

Anber M. M., AYDEMİR U., Donoghue J. F.

PHYSICAL REVIEW D, cilt.81, sa.8, 2010 (SCI-Expanded)

XVII. Remarks on the minimal vectorial standard model

Anber M. M., AYDEMİR U., Donoghue J. F., Pais P.

PHYSICAL REVIEW D, cilt.80, sa.1, 2009 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

I. Axion dark matter with not quite black hole domination

AYDEMİR U.

TURKISH JOURNAL OF PHYSICS, sa.3, 2024 (ESCI)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. Primordial black-hole mimicker in quadratic gravity as dark matter

Aydemir U.

2019 Corfu Summer Institute "School and Workshops on Elementary Particle Physics and Gravity", CORFU 2019, Corfu, Yunanistan, 31 Ağustos - 25 Eylül 2019, cilt.376

II. Gauge noninvariance as tests of emergent gauge symmetry

Donoghue J. F., Anber M. M., Aydemir U.

5th Meeting on CPT and Lorentz Symmetry, CPT 2010, Bloomington, IN, Amerika Birleşik Devletleri, 28 Haziran - 02 Temmuz 2010, ss.113-117

III. Dynamical four-form fields

AYDEMİR U., Grisa L., Sorbo L.

16th International Symposium on Particles, Strings and Cosmology (PASCOS 2010), Valencia, İspanya, 19 - 23 Temmuz 2010, cilt.259

Burslar

2232 - A Uluslararası Lider Araştırmacılar Programı, TÜBİTAK, 2022 - Devam Ediyor

President's International Fellowship Initiative (PIFI) Fellowship, Yabancı Ülkelerin Resmi Kurumları, 2019 - 2021

M.Sc. excellence fellowship, Young Scientist Training Program, TÜBİTAK, 2005 - 2007