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### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: N-3421-2014

ScopusID: 5532575810055553257581005555325758100

Yoksis Araştırmacı ID: 205326

### Eğitim Bilgileri

Doktora, University of Delaware, Physics And Astronomy Department, Amerika Birleşik Devletleri 2009 - 2014

Yüksek Lisans, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli) (İngilizce), Türkiye 2003 - 2006

Lisans, Ege Üniversitesi, Fen Fakültesi, Fizik Bölümü, Türkiye 1997 - 2002

### Yaptığı Tezler

Doktora, Higgs boson, sparticle masses and neutralino dark matter in Yukawa unified models, University of Delaware, Physics And Astronomy Department, 2014

Yüksek Lisans, Extra time-like dimensions, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli) (İngilizce), 2006

### Araştırma Alanları

Fizik, Temel Parçacıklar ve Alanlar, Genel alan ve parçacık teorisi, Özel parçacıkların özellikleri, Özel reaksiyonlar ve fenomenoloji, Özel teoriler ve etkileşme modelleri, parçacık sistematığı, Temel Bilimler

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. Monophoton events with light Higgs bosons in the secluded UMSSM**  
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- II. Third family quasi-Yukawa unification: Higgsino dark matter, NLSP gluino, and all that**  
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- III. Explaining the R (D) and R (D\*) anomalies in the B-L supersymmetric standard model with inverse seesaw mechanism**  
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- IV. **Muon  $g-2$ , neutralino dark matter and stau NLSP**  
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- V. **The 28 GeV dimuon excess in lepton specific THDM**  
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- VI. **Model characterization and dark matter in the secluded  $U(1)$ ' model**  
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- VII. **Proton lifetime in minimal SUSY  $SU(5)$  in light of LHC results**  
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- VIII. **Electron and muon magnetic moments and implications for dark matter and model characterisation in non-universal  $U(1)$ ' supersymmetric models**  
Frank M., Hicyilmaz Y., Mondal S., Ozdal O., Ün C. S.  
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- IX. **Sparticle spectroscopy and dark matter in a  $U(1)(B-L)$  extension of MSSM**  
Ahmed W., Raza S., Shafi Q., Ün C. S., Zhu B.  
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- X. **Stop search in SUSY  $SO(10)$  GUTs with nonuniversal Gaugino masses**  
Altin Z., KIRCA Z., Tanimak T., Salih Un C. S.  
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- XI. **Testing Yukawa unification at LHC Run-3 and HL-LHC**  
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- XII.  **$b$  - Yukawa unification in SUSY  $SU(5)$  with mirage mediation: LHC and dark matter implications**  
Raza S., Shafi Q., Ün C. S.  
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- XIII. **Least fine-tuned  $U(1)$  extended SSM**  
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- XIV. **Sneutrino Dark Matter in the BLSSM**  
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- XV. **Charged Higgs boson in MSSM and beyond**  
Hicyilmaz Y., SELBUZ L., SOLMAZ L., Ün C. S.  
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- XVI. **Phenomenology of 2HDM with vectorlike quarks**  
Arhrib A., Benbrik R., King S. J. D., Manaut B., Moretti S., Ün C. S.  
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- XVII. **Muon  $g-2$  in an alternative quasi-Yukawa unification with a less fine-tuned seesaw mechanism**  
Altin Z., Ozdal O., Ün C. S.  
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- XVIII. **Light stops and fine-tuning in MSSM**  
Cici A., KIRCA Z., Ün C. S.  
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- XIX. **Naturalness and dark matter in the supersymmetric  $B - L$  extension of the standard model**  
Delle Rose L., Khalil S., King S. J. D., Marzo C., Moretti S., Ün C. S.  
PHYSICAL REVIEW D, cilt.96, sa.5, 2017 (SCI-Expanded)
- XX. **Light Higgsinos, heavy gluino, and  $b$ -tau quasi-Yukawa unification: Prospects for finding the gluino at the LHC**

- Hebbar A., Shafi Q., ÜN C. S.  
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- XXI. **Large BR( $h \rightarrow \tau \mu$ ) in supersymmetric models**  
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- XXII. **Muon  $g-2$  in gauge mediated supersymmetry breaking models with adjoint messengers**  
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- XXIII. **Muon anomalous magnetic moment in SUSY B - L model with inverse seesaw**  
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- XXIV. **Quasi-Yukawa unification and fine-tuning in U(1) extended SSM**  
Hicyilmaz Y., Ceylan M., Altas A., SOLMAZ L., ÜN C. S.  
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- XXV. **Gauge mediation models with adjoint messengers**  
Gogoladze I., Mustafayev A., Shafi Q., ÜN C. S.  
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- XXVI. **Mass spectrum and Higgs profile in B - L symmetric SSM**  
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- XXVII. **Reconciling the muon  $g-2$ , a 125 GeV Higgs boson, and dark matter in gauge mediation models**  
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- XXVIII. **Neutralino dark matter and other LHC predictions from quasi Yukawa unification**  
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- XXIX. **NLSP gluino and NLSP stop scenarios from b - tau Yukawa unification**  
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- XXXI. **Generalized soft breaking leverage for the MSSM**  
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- XXXIV. **Nonuniversal gaugino masses and muon  $g-2$**   
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Ajaib M. A., Gogoladze I., Shafi Q., Uen C. S.  
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- XXXVI. **A predictive Yukawa unified SO(10) model: Higgs and sparticle masses**  
Ajaib M. A., Gogoladze I., Shafi Q., Uen C. S.  
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- XXXVII. **Higgs boson mass from t-b-tau Yukawa unification**

- Gogoladze I, Shafi Q, Uen C. S.  
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- XXXVIII. **125 GeV Higgs boson from t-b-tau Yukawa unification**  
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- XXXIX. **SO(10) Yukawa unification with  $\mu < 0$**   
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- XL. **Sparticle spectroscopy with neutralino dark matter from t-b-tau quasi-Yukawa unification**  
Dar S., Gogoladze I, Shafi Q, Uen C. S.  
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- XLI. **Reconsidering extra time-like dimensions**  
Erdem R., Ün C. S.  
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## Diğer Dergilerde Yayınlanan Makaleler

- I. **Low fine-tuning with heavy higgsinos in Yukawa unified SUSY GUTs**  
ÜN C. S.  
Turkish Journal of Physics, cilt.48, sa.1, ss.1-27, 2024 (ESCI)
- II. **Muon g-2 in Light of LHC and DM Experiments**  
ÜN C. S., Gómez M., Shafi Q, Tiwari A.  
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- III. **Muon g – 2, Dark Matter, and Lepton Flavor Violation in SUSY-GUT's**  
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## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Mass Spectrum and Higgs Profile in B-L Symmetric SSM**  
özdal ö., Ün C. S.  
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- II. **Charge Higgs in MSSM and Beyond**  
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- III. **Associated Production of Charged Higgs Boson and Heavy Top Quark in the Left Right Twin Higgs Model at High Energy Electron Positron Collider**  
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- IV. **Associated Production of Charged Higgs Boson and Heavy Top Quark in the Left-Right Twin Higgs Model at High Energy  $e(-)e(+)$  Collider**  
KIRCA Z., Ün C. S., Altın Z.  
10th Jubilee Conference of the Balkan-Physical-Union (BPU), Sofija, Bulgaristan, 26 - 30 Ağustos 2018, cilt.2075
- V. **Sneutrino dark matter, constraints and perspectives**  
Rose L. D., Khalil S., King S. J., Kulkarni S., Marzo C., Moretti S., Ün C. S.  
53rd Rencontres de Moriond on Electroweak Interactions and Unified Theories, EW 2018, La Thuile, İtalya, 10 - 17

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- VI. **Naturalness and Dark Matter in the BLSSM**  
marzo c., ÜN C. S., Rose L. D., King S. J., Khalil S., Moretti S.  
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- VII. **Stop Search with Acceptable Fine-tuning in SUSY Models**  
Çiçi A., ÜN C. S., KIRCA Z.  
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- VIII. **Prohibing the Littlest Higgs Model in  $e\text{-}e\text{-}W H^{\pm} b$  Process**  
Altın Z., KIRCA Z., ÜN C. S.  
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- IX. **Light Higgs Bosons and Muon  $g-2$  in THDM**  
Niş B., Çiçi A., ÜN C. S., KIRCA Z.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- X. **Probing The Littlest Higgs Model in  $e(-) e(+) \rightarrow W-H(+)(T)\text{-over-bar } b$  Process**  
Altın Z., KIRCA Z., ÜN C. S.  
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- XI. **Supersymmetric gauged  $b-1$  model of dark matter and fine tuning**  
Rose L. D., Khalil S., King S., Marzo C., Moretti S., ÜN C. S.  
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- XII. **Lepton Flavor Violating Higgs Decays in Supersymmetric Models**  
ÜN C. S., Hammad A., Khalil S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XIII. **Naturalness and Dark Matter Properties of the BLSSM**  
Rose L. D., Khalil S., King S., Marzo C., Moretti S., ÜN C. S.  
25th International Workshop on Deep-Inelastic Scattering and Related Subjects, DIS 2017, Birmingham, Birleşik Krallık, 3 - 07 Nisan 2017
- XIV. **Stop Search With Acceptable Fine-Tuning in Susy Models**  
Cici A., ÜN C. S., KIRCA Z.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XV. **Associated Production of Heavy W Boson Heavy Top Quark and Bottom Quarks in the Littlest Higgs Model At High Energy Linear  $e e$  Collider**  
Altın Z., KIRCA Z., ÜN C. S.  
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- XVI. **Higgs Boson Decays into Two Photons and Four Leptons in THDM**  
Niş B., Çiçi A., KIRCA Z., ÜN C. S.  
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- XVII. **Production of Heavy Top Quark Associated with Charged Higgs Boson in the Left Right Twin Higgs Model**  
Yıldız B., Altın Z., KIRCA Z., ÜN C. S.  
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- XVIII. **Muon  $g 2$  in MSSM and B L SSM**  
ÜN C. S.  
Scalars 2015, Varşova, Polonya, 3 - 07 Aralık 2015
- XIX. **Littlest Higgs Model in High Energy Linear Electron Positron Colliders: Production of Heavy W boson and Heavy Top Quark**  
Altın Z., ÜN C. S., KIRCA Z.

VIII. International Workshop on Nuclear Structure Properties, 7 - 10 Eylül 2015

XX. Süpersimetrik Modellerde 125 GeV Higgs ve Muon Anomal Manyetik Moment

ÜN C. S.

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XXI. Süpersimetrik Modellerde Stop Top Dejenerasyonu ve İnce Ayar

ÜN C. S.

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XXII. Süpersimetri Higgs ve LHC

ÜN C. S.

III. GENÇ FİZİKÇİLER KONGRESİ, İzmir, Türkiye, 14 - 16 Temmuz 2014

## Desteklenen Projeler

ÜN C. S., KIRCA Z., TÜBİTAK Projesi, Büyük Birleşim Teorilerinden Büyük Hadron Çarpıştırıcısına Hafif Gluino ve Hafif Stop, 2018 - 2021

ÜN C. S., TÜBİTAK Projesi, Süpersimetrik Modellerde Muon Anomal Manyetik Momenti Ve Yukawa Yarı Birleşimi, 2015 - 2018

## Bilimsel Hakemlikler

PHYSICAL REVIEW D - PARTICLES, FIELDS, GRAVITATION AND COSMOLOGY, SCI-E Kapsamındaki Dergi, Ekim 2023

PHYSICAL REVIEW D - PARTICLES, FIELDS, GRAVITATION AND COSMOLOGY, SCI-E Kapsamındaki Dergi, Şubat 2023

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## Metrikler

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## Kongre ve Sempozyum Katılımı Faaliyetleri

29. Uluslararası Süpersimetri Konferansı, Panelist, Ioannina, Yunanistan, 2022

## Davetli Konuşmalar

Yüksek Enerji Fiziği - İstanbul (YEFİST), Çalıştayı, Yıldız Teknik Üniversitesi, Türkiye, Ekim 2023

## Burslar

Maria Zambrano Uluslararası Araştırmacı Bursu, Yabancı Ülkelerin Resmi Kurumları, 2022 - 2023