

## Prof. SEZGİN AYGÜN



### Personal Information

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### International Researcher IDs

ScholarID: qgrzzSMAAAAJ

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Publons / Web Of Science ResearcherID: JYP-5450-2024

ScopusID: 15019159000

Yoksis Researcher ID: 30209

### Education Information

Postgraduate, Çanakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, İş Güvenliği, Turkey 2015 - 2017

Doctorate, Çanakkale Onsekiz Mart University, Fen Bilimleri, Fizik, Turkey 2005 - 2008

Postgraduate, Çanakkale Onsekiz Mart University, Fen Bilimleri, Fizik, Turkey 2002 - 2005

Undergraduate, Çanakkale Onsekiz Mart University, Fen Fakültesi, Fizik, Turkey 1997 - 2001

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Occupational Health and Safety, İŞYERİ HEKİMLİĞİ VE İŞ GÜVENLİĞİ UZMANLIĞI EĞİTİCİ SERTİFİKASI, Ministry of Labor and Social Security, 2021

Occupational Health and Safety, C sınıfı İş güvenliği sertifikası, Çalışma ve Sosyal Güvenlik Bakanlığı, 2015

Education Management and Planning, İlköğretim sınıf Öğretmenliği Sertifikası, ÇOMÜ Eğitim Fakültesi, 2000

### Dissertations

Postgraduate, The meaning of occupational safety to be a occupational safety specialist, Çanakkale Onsekiz Mart University, İş Güvenliği, 2017

Doctorate, SKALER ALAN KAYNAKLI BAZI KOZMOLOJİK MODELLER, Çanakkale Onsekiz Mart University, Fen Edeb. Fak., Fizik, 2008

Postgraduate, KÜTLELİ (MASSIVE) SKALER ALAN KAYNAKLI BAZI KOZMOLOJİK MODELLER VE ÖZELLİKLERİ ,

Canakkale Onsekiz Mart University, Fen Edeb. Fak., Fizik, 2005

## Research Areas

Work Health, Physics, Astronomy and Astrophysics, General Physics, Mathematical Methods in Physics, Natural Sciences

## Academic Titles / Tasks

Professor, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2024 - Continues  
Associate Professor, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2018 - 2024  
Assistant Professor, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2018 - 2018  
Assistant Professor, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2009 - 2018  
Research Assistant, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2003 - 2009

## Academic and Administrative Experience

Head of Department, Canakkale Onsekiz Mart University, Fen Fakültesi, Fizik, 2018 - Continues

## Courses

### Doctorate

Nükleer Teknolojiler ve İş Güvenliği, Doctorate, 2021 - 2022

### Postgraduate

Türkiye'de ve Dünyada İş Sağlığı ve Güvenliği, Postgraduate, 2022 - 2023

Radyasyon, İş ve Çevre Güvenliği, Postgraduate, 2021 - 2022

Kaynak İşlerinde İş Güvenliği, Postgraduate, 2022 - 2023

Risk Değerlendirmesi, Postgraduate, 2021 - 2022

Dönem Projesi, Postgraduate, 2022 - 2023

Görelilik Kuramı, Postgraduate, 2021 - 2022

İş Sağlığı ve Güvenliğinde Yeni Teknolojiler, Postgraduate, 2021 - 2022

Kozmolojiye Giriş I, Postgraduate, 2020 - 2021

Görelilik Alanlar Kuramı I, Postgraduate, 2019 - 2020

Görelilik Alanlar Kuramı II, Postgraduate, 2018 - 2019

### Undergraduate

Fizikte İş Sağlığı ve Güvenliği II, Undergraduate, 2021 - 2022

Teknoloji Öngörülleri ve Değerlendirmeleri, Undergraduate, 2021 - 2022

Fizikte Özel Fonksiyonlar, Undergraduate, 2021 - 2022

Fizikte İş Sağlığı ve Güvenliği I, Undergraduate, 2021 - 2022

Elektromanyetik Teori, Undergraduate, 2019 - 2020

## Supervised Theses

Aygün S., İş sağlığı ve güvenliği açısından risk değerlendirme: ağız ve diş sağlığı merkezi örneği, Postgraduate, T.L.ÜLE(Student), 2023

Aygün S., Bir eğitim kurumunda risk değerlendirme (1 tipi matris), Postgraduate, M.FATİH(Student), 2022

Aygün S., Mobilya sektöründe iş sağlığı ve güvenliği ortam ölçümleri, Postgraduate, K.SEZGİN(Student), 2022

Aygün S., Artırılmış gerçeklik teknolojisi ile iş sağlığı ve güvenliği kartlarının hazırlanması, Postgraduate,

K.AKSU(Student), 2022

Aygün S., Acil yardım ve afet yönetimi öğrencilerinin iş sağlığı ve güvenliği farkındalığı, Postgraduate, A.ÖZKAN(Student), 2022

Aygün S., İş sağlığı ve güvenliği laboratuvarı kurulması ve uygulanması, Postgraduate, Z.BAĞCI(Student), 2021

Aygün S., 1915 Çanakkale Köprüsü deniz inşaatlarında fine kinney metodu ile risk değerlendirmesi, Postgraduate, Z.İŞIKLAR(Student), 2021

Aygün S., Ulupınar gözlemevinin iş sağlığı ve güvenliği açısından incelenmesi, Postgraduate, H.ÇAĞLAR(Student), 2021

Aygün S., Laboratuvarlar için yeni bir risk analiz yöntemi, Postgraduate, U.GÜLER(Student), 2020

Aygün S., Bir ortaöğretim kurumunda risk değerlendirmesi, Postgraduate, S.TÜRKYILMAZ(Student), 2020

AYGÜN S., Ortaöğretim 10. Sınıf Öğrencilerinin Nükleer Enerji Hakkındaki Bilgi Düzeylerinin Belirlenmesi, Postgraduate, D.ÇELİK(Student), 2019

AYGÜN S., Meslek Yüksekokulu Öğrencilerinin İş Güvenliği Algısı, Postgraduate, E.MERDİN(Student), 2019

AYGÜN S., Bianchi Tip *Viih* Evreni İçin Genel Rölativite ve Teleparalel Gravitasyon Teorilerinde Enerji-Momentum Probleminin Araştırılması, Postgraduate, Ş.ÖZKURT(Student), 2019

AYGÜN S.,  $f(R,T)$  çekim teorisinde genelleştirilmiş modeller ve madde çözümleri, Postgraduate, A.KABAK(Student), 2019

Aygün S., Bianchi tip *Viih* evreni için genel rölativite ve teleparalel gravitasyon teorilerinde enerji-momentum probleminin araştırılması, Postgraduate, Ş.ÖZKURT(Student), 2019

AYGÜN S., Yüksek boyutlu FRW evreni için self creation kozmolojide kuark madde çözümleri, Postgraduate, R.ŞEN(Student), 2018

AYGÜN S., Alternatif gravitasyon teorilerinde çeşitli madde çözümleri, Doctorate, H.ÇAĞLAR(Student), 2018

AYGÜN S., N boyutlu evren modeli için enerji momentum probleminin araştırılması, Postgraduate, G.KIY(Student), 2014

AYGÜN S., N boyutlu kaluza-klein evreni için genel relativite ve teleparalel gravitasyon teorisinde enerji momentumun yerelleştirilmesi problemi / Energy momentum localization problem for N dimensional kaluza-klein universe in general relativity and teleparalel gravity, Postgraduate, H.Toprak(Student), 2014

AYGÜN S., Lyra ve Riemann geometrilerinde yüksek boyutlu FRW evreni için genelleştirilmiş acayip quark madde çözümleri, Postgraduate, H.Çağlar(Student), 2013

## Advising Graduates (Non-Thesis)

Aygün S., APPLICATIONS OF OCCUPATIONAL HEALTH AND SECURITY IN AN AMMUNITION SORTING FACILITY, Masters (Non-Thesis), Ş.Şahin(Student), 2023

Aygün S., AĞIZ VE DİŞ SAĞLIĞI MERKEZLERİNDE İŞ SAĞLIĞI VE GÜVENLİĞİ ÖNLEMLERİ VE RİSK ANALİZİ, Masters (Non-Thesis), E.KONAR(Student), 2023

Aygün S., OFİS ÇALIŞMALARINDA KAS İSKELET SİSTEMİ RAHATSIZLIKLARI VE ERGONOMİK RİSKLERİN İŞ SAĞLIĞI VE GÜVENLİĞİ AÇISINDAN DEĞERLENDİRİLMESİ, Masters (Non-Thesis), B.OYMAK(Student), 2023

Aygün S., A SURVEY IS BASED ON WORKERS WORK IN MANY VARIED SECTORS AND THEIR HAVING OCCUPATIONAL ACCIDENTS AND OCCUPATIONAL DISEASES STATISTICAL INFORMATION, Masters (Non-Thesis), H.ÜNAL(Student), 2023

Aygün S., GIDA ÜRETİCİLERİNDE İŞ SAĞLIĞI VE GÜVENLİĞİ, Masters (Non-Thesis), C.GÜMÜŞ(Student), 2023

Aygün S., İLKOKULLARDA MEYDANA GELEN KAZALAR, NEDENLERİ, TEDAVİSİ VE ÖNLEME ÇALIŞMALAR, Masters (Non-Thesis), A.GÜMÜŞ(Student), 2023

Aygün S., Investigation of Dust Formation Due To Production Method in Underground Coal Mine, Masters (Non-Thesis), S.ALTINKAYA(Student), 2022

Aygün S., PROBLEMS RELATED TO OCCUPATIONAL HEALTH AND SAFETY AND PROTECTION MEASURES IN PRIVATE SECURITY, Masters (Non-Thesis), R.DEVRET(Student), 2022

Aygün S., Examination of Natural Disaster Management in Turkey in Terms of Occupational Health And Safety, Masters (Non-Thesis), A.Yıldırım(Student), 2022

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, December, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, August, 2022

Doctoral Examination, Doctoral Examination, Çanakkale Onsekiz Mart Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, February, 2022

Doctoral Examination, Doctoral Examination, Çanakkale Onsekiz Mart Üniversitesi, January, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, October, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, May, 2021

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Ruban Universe Model Solutions with Scalar Field in  $f(R, T)$  Gravity**  
AYGÜN S., AKTAŞ A.  
Iranian Journal of Science, vol.49, no.1, pp.253-258, 2025 (SCI-Expanded)
- II. **Investigation of dark energy scenarios in  $f(Q)$  gravitation theory**  
Jalali S., AYGÜN S.  
Modern Physics Letters A, vol.39, no.16, 2024 (SCI-Expanded)
- III. **Møller energy momentum distribution for higher dimensional Morris Thorne wormhole**  
AYGÜN S., AKTAŞ C.  
New Astronomy, vol.105, 2024 (SCI-Expanded)
- IV. **Domain wall with quark matters cosmological models in  $f(R,T)$  theory**  
Çağlar H., Taşer D., Aygün S.  
Indian Journal of Physics, vol.98, no.1, pp.397-405, 2024 (SCI-Expanded)
- V. **Investigation of the teleparallel energy momentum problem for Texture metric**  
AYGÜN S., AKTAŞ C.  
New Astronomy, vol.101, 2023 (SCI-Expanded)
- VI. **Does magnetized strange quark matter exist in the early universe?**  
Kalkan S., AKTAŞ C., AYGÜN S.  
Modern Physics Letters A, vol.37, no.39-40, 2022 (SCI-Expanded)
- VII. **Scalar field solutions for anisotropic universe models in various gravitation theories**  
Kabak A., AYGÜN S.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.17, no.2, 2020 (SCI-Expanded)
- VIII. **Various dark energy models with time-varying  $G$  and  $\Lambda$  in  $f(R, T)$  gravitation theory**  
AYGÜN S.  
MODERN PHYSICS LETTERS A, vol.34, no.34, 2019 (SCI-Expanded)
- IX. **Quadratic equation of state solutions with  $\Lambda$  in  $f(R, T)$  gravitation theory**  
Aygün S., Aktas C., Mishra B.  
INDIAN JOURNAL OF PHYSICS, vol.93, no.3, pp.407-414, 2019 (SCI-Expanded)
- X. **Teleparallel energy-momentum distribution of various black hole and wormhole metrics**  
Aygün S., Baysal H., Aktas C., Yilmaz I., Sahoo P. K., Tarhan I.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.33, no.30, 2018 (SCI-Expanded)
- XI. **Relationship between magnetic field and anisotropy parameter in gravitation theories**

- AKTAŞ C., AYGÜN S., Sahoo P. K.  
MODERN PHYSICS LETTERS A, vol.33, no.24, 2018 (SCI-Expanded)
- XII. **Scalar Field Cosmology in  $f(R,T)$  Gravity with Lambda**  
Aygün S., Aktas C., Sahoo P. K., Bishi B. K.  
GRAVITATION & COSMOLOGY, vol.24, no.3, pp.302-307, 2018 (SCI-Expanded)
- XIII. **FLRW cosmological models with quark and strange quark matters in  $f(R, T)$  gravity**  
Nagpal R., Singh J. K., Aygün S.  
ASTROPHYSICS AND SPACE SCIENCE, vol.363, no.6, 2018 (SCI-Expanded)
- XIV. **Magnetized strange quark matter in  $f(R, T)$  gravity with bilinear and special form of time varying deceleration parameter**  
Sahoo P. K., Sahoo P., Bishi B. K., AYGÜN S.  
NEW ASTRONOMY, vol.60, pp.80-87, 2018 (SCI-Expanded)
- XV. **Magnetized strange quark model with Big Rip singularity in  $f(R, T)$  gravity**  
Sahoo P. K., Sahoo P., Bishi B. K., Aygün S.  
MODERN PHYSICS LETTERS A, vol.32, no.21, 2017 (SCI-Expanded)
- XVI. **Energy distributions of Bianchi type-VI<sub>h</sub> Universe in general relativity and teleparallel gravity**  
Ozkurt S., AYGÜN S.  
PRAMANA-JOURNAL OF PHYSICS, vol.88, no.4, 2017 (SCI-Expanded)
- XVII. **Magnetized strange quark matter solutions in  $f(R, T)$  gravity with cosmological constant**  
AKTAŞ C., AYGÜN S.  
CHINESE JOURNAL OF PHYSICS, vol.55, no.1, pp.71-78, 2017 (SCI-Expanded)
- XVIII. **Strange quark matter solutions for Marder's universe in  $f(R, T)$  gravity with Lambda**  
Aygün S., Aktas C., Yilmaz I.  
ASTROPHYSICS AND SPACE SCIENCE, vol.361, no.12, 2016 (SCI-Expanded)
- XIX. **Higher dimensional FRW universe solutions with quark and strange quark matter in creation field cosmology**  
AYGÜN S., AKTAŞ C., YILMAZ İ., Sahin M.  
CHINESE JOURNAL OF PHYSICS, vol.54, no.5, pp.810-819, 2016 (SCI-Expanded)
- XX. **Non-existence of Brans-Dicke theory in higher dimensional FRW universe**  
ÇAĞLAR H., AYGÜN S.  
ASTROPHYSICS AND SPACE SCIENCE, vol.361, no.6, 2016 (SCI-Expanded)
- XXI. **String cloud and domain walls with quark matter for a higher dimensional FRW universe in self creation cosmology**  
ÇAĞLAR H., AYGÜN S.  
CHINESE PHYSICS C, vol.40, no.4, 2016 (SCI-Expanded)
- XXII. **Higher-dimensional energy-momentum problem for Bianchi types V and I universes in gravitation theories**  
Kiy G., AYGÜN S.  
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.12, no.4, 2015 (SCI-Expanded)
- XXIII. **Quark and strange quark matter solutions for higher dimensional FRW universe in Lyra geometry**  
AYGÜN S., CAĞLAR H., TASER D., AKTAŞ C.  
EUROPEAN PHYSICAL JOURNAL PLUS, vol.130, no.1, 2015 (SCI-Expanded)
- XXIV. **Energy-momentum localization for Bianchi type-IV Universe in general relativity and teleparallel gravity**  
AYGÜN S., TARHAN İ.  
PRAMANA-JOURNAL OF PHYSICS, vol.78, no.4, pp.531-548, 2012 (SCI-Expanded)
- XXV. **Behaviors of dark energy and mesonic scalar field for anisotropic universe in  $f(R)$  gravity**  
AKTAŞ C., AYGÜN S., Yilmaz I.  
PHYSICS LETTERS B, vol.707, no.2, pp.237-242, 2012 (SCI-Expanded)
- XXVI. **Non-existence of a massive scalar field for the Marder universe in Lyra and Riemannian geometries**  
AYGÜN S., AKTAŞ C., Yilmaz I.

- JOURNAL OF GEOMETRY AND PHYSICS, vol.62, no.1, pp.100-106, 2012 (SCI-Expanded)
- XXVII. **Energy Momentum Distributions of Texture and Monopole Metrics in General Relativity**  
Aygun S.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.49, no.9, pp.2288-2298, 2010 (SCI-Expanded)
- XXVIII. **The Decay of Massive Scalar Field in Non-Static Godel Type Universe with Viscous Fluid and Heat Flow**  
Ayguen S., TARHAN İ.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.47, no.12, pp.3257-3266, 2008 (SCI-Expanded)
- XXIX. **Scalar field theory and energy-momentum problem of Yilmaz-Rosen metric in general relativity and teleparallel gravity**  
AYGÜN S., TARHAN İ., Baysal H.  
ASTROPHYSICS AND SPACE SCIENCE, vol.314, no.4, pp.323-330, 2008 (SCI-Expanded)
- XXX. **Energy distributions of the Szekeres universes in teleparallel gravity**  
AYGÜN S., TARHAN İ., BAYSAL H.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.47, no.3, pp.722-731, 2008 (SCI-Expanded)
- XXXI. **Energy momentum of marder universe in teleparallel gravity**  
Ayguen S., Baysal H., Tarhan I.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.46, no.10, pp.2607-2616, 2007 (SCI-Expanded)
- XXXII. **Energy and momentum of Bell-Szekeres space-time in Moller prescription**  
Aygun S.  
ACTA PHYSICA POLONICA B, vol.38, no.1, pp.73-79, 2007 (SCI-Expanded)
- XXXIII. **Energy-momentum localization in Marder space-time**  
Aygun S., Aygun M., Tarhan I.  
PRAMANA-JOURNAL OF PHYSICS, vol.68, no.1, pp.21-30, 2007 (SCI-Expanded)
- XXXIV. **Energy distributions in Szekeres type I and II space-times**  
Aygun S., Aygun M., Tarhan I.  
ACTA PHYSICA POLONICA B, vol.37, no.10, pp.2781-2793, 2006 (SCI-Expanded)
- XXXV. **Energy and momentum of Rigidly Rotating Wormhole space-time**  
Aygun M., Yilmaz I., Aygun S.  
ACTA PHYSICA POLONICA B, vol.37, no.10, pp.2795-2803, 2006 (SCI-Expanded)
- XXXVI. **Topological defect solutions in the spherically symmetric space-time admitting conformal motion**  
Yilmaz I., Aygun M., Aygun S.  
GENERAL RELATIVITY AND GRAVITATION, vol.37, no.12, pp.2093-2104, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Barrow holographic dark energy models in Lyra and general relativity theories**  
Aktaş A., Aygün S.  
Journal of New Results in Science, vol.13, no.2, pp.119-127, 2024 (Peer-Reviewed Journal)
- II. **Behaviour of Magnetized Strange Quark Matter in  $f(R,T)$  Theory for General Kantowski-Sachs Model**  
BAYSAL H., AYGÜN S., YILMAZ İ., AKTAŞ C.  
International Journal of Innovative Approaches in Science Research, vol.6, no.2, pp.46-63, 2022 (Peer-Reviewed Journal)
- III. **Ulupınar Gözlemevinde Fiziksel Risk Etmenleri Araştırması**  
ÇAĞLAR H., AYGÜN S.  
International Journal of Innovative Approaches in Science Research, vol.5, 2021 (Peer-Reviewed Journal)
- IV. **Meslek Yüksekokulu Öğrencilerinin İş Güvenliği Algısı**  
MERDİN E., AYGÜN S.  
International Journal of Innovative Approaches in Science Research, vol.3, no.1, pp.9-19, 2019 (Peer-Reviewed Journal)

- V. **Energy-momentum localization problem in higherdimensional kasner type universe model**  
AYGÜN S.  
International Journal of Mathematics and Systems Science, 2018 (Peer-Reviewed Journal)
- VI. **Mühendis ve Teknik Eleman Adaylarının İş Güvenliği Konusunda Tutumlarının Belirlenmesi**  
AYGÜN S., ÖZTÜRK Ö. F.  
International Journal of Innovative Approaches in Science Research, vol.1, no.1, pp.21-32, 2017 (Peer-Reviewed Journal)
- VII. **Time Periodic Varying Deceleration Parameter in Reconstructed  $f(R,T)$  Gravity**  
AKTAŞ C., AYGÜN S.  
Archives of Current Research International, vol.11, no.1, pp.1-6, 2017 (Peer-Reviewed Journal)
- VIII. **The Behaviour of Magnetized Strange Quark Matter on Bianchi V Universe in the Framework of  $f(R,T)$  Theory**  
AYGÜN S., AKTAŞ C., YILMAZ İ.  
Archives of Current Research International, vol.11, no.2, pp.1-8, 2017 (Peer-Reviewed Journal)
- IX. **Higher Dimensional Topological Defect Solutions with Quark Matter in Gravitation Theories**  
ÇAĞLAR H., AYGÜN S.  
Advance in Astrophysics, pp.83-94, 2017 (Peer-Reviewed Journal)
- X. **Higher Dimensional Topological Defect Solutions with Quark Matter in Gravitation Theories**  
Çağlar h., AYGÜN S.  
Advances in Astrophysics, vol.2, no.2, pp.83-94, 2017 (Peer-Reviewed Journal)
- XI. **Marder type universe with bulk viscous string cosmological model in  $f(R,T)$  gravity**  
AYGÜN S.  
TURKISH JOURNAL OF PHYSICS, vol.41, no.5, pp.436-446, 2017 (ESCI)
- XII. **Higher Dimensional FRW Universe Solutions in Lyra Geometry**  
çağlar H., AYGÜN S., Nalbant G., AKTAŞ C.  
Balkan Physics Letters, 2016 (Peer-Reviewed Journal)
- XIII. **Higher Dimensional Topological Defect Solutions with Quark Matter in Gravitation Theories**  
Çağlar H., AYGÜN S.  
Advances in Astrophysics, no.2, pp.83-94, 2016 (Peer-Reviewed Journal)
- XIV. **Bulk Viscous String Cloud with Strange Quark Matter in Self Creation Cosmology**  
Çağlar H., Aygün S.  
IOSR Journal of Mathematics, no.11, pp.53-59, 2015 (Peer-Reviewed Journal)
- XV. **Bulk Viscous String Cloud with Strange Quark Matter in SelfCreation Cosmology**  
HALİFE Ç., AYGÜN S.  
IOSR Journal of Mathematics, vol.11, no.6, pp.53-59, 2015 (Peer-Reviewed Journal)
- XVI. **LRS BIANCHI I MODEL WITH STRANGE QUARK MATTER ATTACHED TO STRING CLOUD IN BRANS DICKE THEORY**  
ÇAĞLAR H., AYGÜN S., AKTAŞ C., TAŞER D.  
Balkan Physics Letters, vol.22, no.221014, pp.129-137, 2014 (Peer-Reviewed Journal)
- XVII. **LRS BIANCHI I MODEL WITH STRANGE QUARK MATTER ATTACHED TO STRING CLOUD IN BRANS-DICKE THEORY**  
Çağlar H., AYGÜN S., AKTAŞ C., TAŞER D.  
Balkan Physics Letters, vol.22, no.221014, pp.129-137, 2014 (Peer-Reviewed Journal)

## Books

- I. **Karmaşık (Kompleks) Sayılar**  
AYGÜN S., KANMAZ K., baykal m., AŞKIN A., ZAYİM B., İPEK D., ÜNLÜ E., KANMAZ E., KOCABIYIK H., HACIKURU İ., et al.  
in: Temel Matematik, Can AKTAŞ, Editor, Kriter, 2013

## Papers Published in Refereed Scientific Meetings

- I. **LRS BIANCHI I MODEL WITH STRANGE QUARK MATTER ATTACHED TO STRING CLOUD IN BRANS-DICKE THEORY**  
ÇAĞLAR H., AYGÜN S., AKTAŞ C., TAŞER D.  
Turkish Physical Society 31st International Physics Congress, Muğla, Turkey, 21 - 24 July 2014
- II. **NONEXISTENCE SOLUTIONS OF BIANCHI TYPE IV UNIVERSE IN PRESENCE OF SCALAR FIELD**  
Çağlar H., Taşer D., Aygün S.  
BİLTEK-VII INTERNATIONAL SYMPOSIUM ON CURRENT DEVELOPMENTS IN SCIENCE, TECHNOLOGY AND SOCIAL SCIENCES, Ankara, Turkey, 26 - 27 May 2023, pp.1017-1024
- III. **KUADRATİK FORMDA İDEAL AKIŞKAN İÇEREN FRW EVRENİNİN LYRA TEORİDE İNCELENMESİ**  
ÇAĞLAR H., TAŞER D., AYGÜN S.  
CUMHURİYET 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Ankara, Turkey, 23 April 2023
- IV.  **$f(R,T)$  KÜTLEÇEKİM TEORİSİNDE MARDER EVRENİ ÇÖZÜMLERİ**  
ÇAĞLAR H., TAŞER D., AYGÜN S.  
CUMHURİYET 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Turkey, 23 April 2023, pp.148-154
- V.  **$f(R,T)$  Kütleçekim Teorisinde Marder Evreni Çözümleri**  
Çağlar H., Taşer D., Aygün S.  
CUMHURİYET 8TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES , Ankara, Turkey, 23 April 2023, pp.148-154
- VI. **Kuadratik Formda İdeal Akışkan İçeren FRW Evreninin Lyra Teoride İncelenmesi**  
Çağlar H., Taşer D., Aygün S.  
CUMHURİYET 8TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Ankara, Turkey, 23 April 2023, pp.142-147
- VII. **TSALLIS HOLOGRAFİK KARANLIK ENERJİNİN UZAY – ZAMAN GEOMETRİSİ**  
AKTAŞ C., AYGÜN S.  
ANADOLU 11.th International Conference on Applied Science, Diyarbakır, Turkey, 29 December 2022
- VIII. **LYRA TEORİDE TSALLIS HOLOGRAFİK KARANLIK ENERJİNİN DAVRANIŞININ İNCELENMESİ**  
AYGÜN S., AKTAŞ C.  
ANADOLU 11 th International Conference on Applied Science, Diyarbakır, Turkey, 29 December 2022
- IX. **FARKLI TEORİLERDE BUCHDAHL MODELİ İÇİN ENERJİ MOMENTUM DAĞILIMININ ARAŞTIRILMASI**  
AYGÜN S., AKTAŞ C.  
KARADENİZ 11th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 17 - 18 December 2022
- X. **ENERJİ-MOMENTUM DAĞILIMLARININ BERTOTTİ-ROBİNSON EVRENİNDE ARAŞTIRILMASI**  
AKTAŞ C., AYGÜN S.  
KARADENİZ 11th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 17 - 18 December 2022
- XI. **Enerji-Momentum Dağılımlarının Bertotti-Robinson Evreninde Araştırılması**  
AKTAŞ C., AYGÜN S.  
KARADENİZ 11th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 17 - 18 December 2022
- XII. **Farklı Teorilerde Buchdahl Modeli İçin Enerji Momentum Dağılımının Araştırılması**  
AYGÜN S., AKTAŞ C.  
KARADENİZ 11th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 17 - 18 December 2022
- XIII. **Seaz-Ballester Teoride Anizotropik Akışkanlı Ruban Evreninin İncelenmesi**  
ÇAĞLAR H., TAŞER D., AYGÜN S.  
5th International Congress on Life, Social and Health Sciences in a Changing World, 26 - 27 March 2022
- XIV. **SAEZ-BALLESTER TEORİDE ANİZOTROPİK AKIŞKANLI RUBAN EVRENİNİN İNCELENMESİ**  
Çağlar H., Taşer D., Aygün S.  
5TH INTERNATIONAL CONGRESS ON LIFE SOCIAL AND HEALTH SCIENCES IN A CHANGING WORLD, İstanbul, Turkey, 26 - 27 March 2022, pp.193-201
- XV. **Strange Quark Matter Solutions Attached to String in the Ruban Universe**  
ÇAĞLAR H., TAŞER D., AYGÜN S.



VII. ULUSLARARASI BATTALGAZİ BİLİMSEL ÇALIŞMALAR KONGRESİ 2022, Malatya, Turkey, 28 - 29 January 2022

- XVI. **Ruban Evreninde Sicime İliştirilmiş Acayip Kuark Madde Çözümleri**  
ÇAĞLAR H., TAŞER D., AYGÜN S.  
VII. INTERNATIONAL BATTALGAZİ SCIENTIFIC STUDIES CONGRESS, 28 January 2022
- XVII. **RUBAN EVRENİNDE SİCİME İLİŞTİRİLMİŞ ACAYİP KUARK MADDE ÇÖZÜMLERİ**  
Çağlar H., Taşer D., Aygün S.  
VII. INTERNATIONAL BATTALGAZİ SCIENTIFIC STUDIES CONGRESS, Malatya, Turkey, 28 - 29 January 2022, pp.235-246
- XVIII. **NON-EXISTENCE SOLUTIONS OF  $f(R,T)$  GRAVITATION THEORY IN BIANCHI TYPE IV UNIVERSE MODEL**  
Aygün S., Çağlar H.  
II. International Science and Innovation Congress, Ankara, Turkey, 25 - 27 July 2021, pp.133-137
- XIX. **INVESTIGATION OF ULUPINAR OBSERVATORY IN TERMS OF AIR QUALITY**  
Çağlar H., Aygün S.  
II. International Science and Innovation Congress, Ankara, Turkey, 25 - 27 June 2021, pp.138-145
- XX. **Ulupınar Gözlemevinin Hava Kalitesi Bakımından İncelenme**  
ÇAĞLAR H., AYGÜN S.  
II. International Science and Innovation Congress 2021, Turkey, 25 - 27 June 2021
- XXI.  **$f(R, T)$  KÜTLE ÇEKİM TEORİSİ ÇERÇEVESİNDE SİCİM BULUTU MADDE DAĞILIMININ ARAŞTIRILMASI**  
AYGÜN S.  
2. Ulusal Başkent Disiplinler Arası Bilimsel Çalışmalar Kongresi, Turkey, 08 November 2020
- XXII. **ORTAÖĞRETİM KURUMLARINDA RİSK DEĞERLENDİRMESİ**  
TÜRKYILMAZ YAZGI S., AYGÜN S.  
TRAKYA ÜNİVERSİTELER BİRLİĞİ IV. LİSANSÜSTÜ ÖĞRENCİ KONGRESİ, Turkey, 14 - 15 November 2019
- XXIII. **İŞ SAĞLIĞI VE GÜVENLİĞİ LABORATUVARI KURULMASI VE UYGULANMASI**  
BAĞCI Z., AYGÜN S.  
TRAKYA ÜNİVERSİTELER BİRLİĞİ IV. LİSANSÜSTÜ ÖĞRENCİ KONGRESİ, Turkey, 14 - 15 November 2019
- XXIV. **String Cloud Solutions in  $f(R,T)$  Gravity**  
ÇAĞLAR H., AYGÜN S.  
Türk Fizik derneği 35. Uluslar arası Fizik kongresi, 4 - 08 September 2019
- XXV. **Ortaöğretim 10. Sınıf Öğrencilerinin Nükleer Enerji Hakkında Bilgi Düzeylerinin Belirlenmesi**  
ÇELİK D., AYGÜN S.  
ULUSLARARASI MARMARA FEN VE SOSYAL BİLİMLER KONGRESİ IMASCON 2019 BAHAR, 26 - 28 April 2019
- XXVI. **LABORATUVARLAR İÇİN İŞ SAĞLIĞI VE GÜVENLİĞİ RİSK ANALİZİ YÖNTEMLERİNİN GELİŞTİRİLMESİ**  
GÜLER U., AYGÜN S., DOĞAN DOĞU Ş., ONAY C.  
4.ULUSLARASI İŞ GÜVENLİĞİ VE ÇALIŞAN SAĞLIĞI KONGRESİ, 12 April 2019
- XXVII. **Magnetized Strange Quark Matter Solutions for Kasner Type Universe in  $f(R,T)$  Gravity**  
PARLAK D., AYGÜN S.  
TFD34 - Turkish Physical Society 34th International Physics Congress, 5 - 09 September 2018
- XXVIII. **Kantowski-Sachs Universe Model Solutions in  $f(R,T)$  Gravity**  
PARLAK D., AYGÜN S.  
TFD34 - Turkish Physical Society 34th International Physics Congress, 5 - 09 September 2018
- XXIX. **Massive Scalar Field Solutions in  $f(R,T)$  Gravity and General Relativity Theory**  
KABAK A., AYGÜN S.  
TFD34 - Turkish Physical Society 34th International Physics Congress, 5 - 09 September 2018
- XXX. **Strange Quark Matter Solutions in Various Gravitation Theories**  
KABAK A., AYGÜN S.  
TFD34 - Turkish Physical Society 34th International Physics Congress, 05 September 2018
- XXXI. **Taşınabilir Cihazlar için Otomatik Anket Oluşturucu Uygulaması**  
AKTAŞ C., AYGÜN S., ESEN AYGÜN H., ŞAHİN M.  
ULEAD 2017, 27 - 29 April 2017
- XXXII. **Magnetized Strange Quark Matter Solutions For Marder Type Universe In  $f(R,T)$  Theory**

- AKTAŞ C., AYGÜN S.  
Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017
- XXXIII. **Gödel type universe in  $f(R,T)$  gravity with quadratic equation of state**  
AKTAŞ C., AYGÜN S.  
International Conference on Applied Analysis and Mathematical Modeling, 3 - 07 July 2017
- XXXIV. **Gödel type universe in  $f(R,T)$  theory with quadratic equation of state**  
AKTAŞ C., AYGÜN S.  
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING (ICAAMM2017), 3 - 07 July 2017
- XXXV. **Taşınabilir Cihazlar İçin Otomatik Anket Oluşturucu Uygulaması**  
AKTAŞ C., AYGÜN S., ESEN AYGÜN H., ŞAHİN M.  
VII. Uluslararası Eğitimde Arştırmalar Kongresi(ULEAD), 27 - 29 April 2017
- XXXVI. **Bianchi type-I universe in Lyra manifold with quadratic equation of state**  
ŞEN R., AYGÜN S.  
Turkish Physical Society 32nd International Physics Congress (TPS32), 6 - 09 September 2016
- XXXVII. **Higher Dimensional FRW Universe Solutions in Creation Field Cosmology**  
ÇAĞLAR H., AYGÜN S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- XXXVIII. **Bianchi type-I Universe in  $f(R, T)$  Modified Gravity with Quark Matter and A**  
ÇAĞLAR H., AYGÜN S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- XXXIX. **Energy Momentum Distributions of Monopole Metric in Teleparallel Gravity**  
AYGÜN S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- XL. **Higher Dimensional FRW Universe Solutions in Lyra Geometry**  
ÇAĞLAR H., AYGÜN S., AKTAŞ C., Nalbant G.  
Turkish Physical Society 30th International Physics Congress, Turkey, 2 - 06 September 2013, pp.212-219
- XLI. **Self Creation Kozmolojide Yüksek Boyutlu FRW için İkinci Dereceden Durum Denklemli Çözümler**  
ŞEN R., AYGÜN S.  
TRAKYA ÜNİVERSİTELER BİRLİĞİ LİSANSÜSTÜ ÖĞRENCİ KONGRESİ, Turkey, 29 - 30 April 2016
- XLII. **Exact Solutions of Bulk Viscous With String Cloud Attached to Strange Quark Matter For Higher Dimensional FRW Universe in Lyra Geometry**  
ÇAĞLAR H., AYGÜN S.  
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722
- XLIII. **Higher Dimensional Strange Quark Matter Solutions in Self Creation Cosmology**  
Sen R., Aygun S.  
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722
- XLIV. **LRS Binachi I Model with Strange Quark Matter Attached to String Cloud in Brans-Dicke Theory**  
AYGÜN S., ÇAĞLAR H.  
31th International Physics Congress of Turkish-Physical-Society (TPS), Muğla, Turkey, 21 - 24 July 2014, pp.129-137
- XLV. **Energy momentum Localization Problem in Higher and Lower Dimensional quasi Spherical Szekeres space time Models**  
AYGÜN S., Çağlar H.  
TFD 30. Uluslar arası Fizik Kongresi 2-5 Eylül 2013 İstanbul/Türkiye, 2 - 05 September 2013
- XLVI. **Energy and Momentum Localization for Non Static Gödel Space Time in General Relativity and**

## Teleparallel Gravity

KIY G., BAYSAL H., AYGÜN S.

Türk Fizik Derneği 28. Uluslararası Fizik Kongresi, 6 - 09 September 2011

## XLVII. BERTOTTİ ROBINSON UZAY ZAMANININ ENERJİ MOMENTUM DAĞILIMLARI

AYGÜN S., AYGÜN M., TARHAN İ., BAYSAL H.

XVI. Ulusal Astronomi Kongresi, V. Ulusal Astronomi Kongresi, Turkey, 8 - 12 September 2008

## XLVIII. Silindirik Simetrik Marder Uzay-Zamanında Enerji-Momentum Probleminin Araştırılması

ULU DOĞRU M., YILMAZ İ., AYGÜN S.

6th XVI. Ulusal Astronomi Kongresi ve V. Ulusal Öğrenci Astronomi Kongresi, Turkey, 8 - 12 September 2008

## XLIX. The Decay of Massive Scalar Field in a Rotating Universe

AYGÜN S., AYGÜN M., VARLIKLI N., TARHAN İ.

12th Regional Conference on Mathematical Physics, Islamabad, Pakistan, 27 March - 01 April 2006

## Supported Projects

AYGÜN S., JALALI S., Project Supported by Higher Education Institutions, Alternatif Kütleçekim Teorileri ve Evrenin İvmelenmesi, 2022 - Continues

AYGÜN S., AKTAŞ A., Project Supported by Higher Education Institutions, Modifiye Kütleçekim Teorileri ve Çözüm Önerileri, 2022 - 2023

AKTAŞ C., AYGÜN S., Project Supported by Higher Education Institutions, Tsallis Holografik Karanlık Enerjili Evren Modellemesi, 2022 - 2023

AYGÜN S., AKTAŞ C., Project Supported by Higher Education Institutions, Farklı Kütleçekim Teorilerinde Çeşitli Enerji Momentum Teorilerinin Karşılaştırılması, 2022 - 2023

ÇAĞLAR H., AYGÜN S., TAŞER D., Project Supported by Higher Education Institutions, Alternatif Kütleçekim Teorilerinde Çeşitli Evren Modellerinin İncelenmesi, 2021 - 2023

AYGÜN S., Çağlar H., Project Supported by Higher Education Institutions, Ulupınar Gözlemevinin İş Sağlığı ve Güvenliği Açısından İncelenmesi, 2020 - 2021

AYGÜN S., AKTAŞ C., YILMAZ İ., BAYSAL H., Project Supported by Higher Education Institutions, Tetrad Teoride Kara Delik ve Solucan Delikleri için Enerji Momentum Dağılımlarının Araştırılması, 2018 - 2018

AKTAŞ C., AYGÜN S., Project Supported by Higher Education Institutions, Çeşitli Topolojik Kusurların  $f(R,T)$  Çekim Teorisinde İncelenmesi, 2018 - 2018

AYGÜN S., ŞEN R., Project Supported by Higher Education Institutions, Yüksek Boyutlu FRW Evreni için Self Creation Kozmolojide Kuark Madde Çözümleri, 2017 - 2018

AYGÜN S., ÇAĞLAR H., Project Supported by Higher Education Institutions, Alternatif Gravitasyon Teorilerinde Çeşitli Madde Çözümleri, 2016 - 2018

AYGÜN S., AKTAŞ C., YILMAZ İ., Project Supported by Higher Education Institutions, Evrenin ivmelenmesi probleminin  $f(R,T)$  gravitasyon teorisinde araştırılması, 2017 - 2017

AKTAŞ C., AYGÜN S., Project Supported by Higher Education Institutions, Alternatif Gravitasyon Teorilerinde Yeni Çözüm Önerileri Üzerine, 2017 - 2017

AYGÜN S., AKTAŞ C., YILMAZ İ., ŞAHİN M., Project Supported by Higher Education Institutions, Creation Field teori ve evrenin ivmelenmesi probleminin araştırılması, 2016 - 2016

AKTAŞ C., ŞAHİN M., ESEN H., AYGÜN S., Project Supported by Higher Education Institutions, Taşınabilir Cihazlar İçin Otomatik Anket Oluşturucu Uygulaması, 2015 - 2016

AYGÜN S., Project Supported by Higher Education Institutions, ENERJİ MOMENTUM'UN YERELLEŞTİRİLMESİ PROBLEMİ VE ÇEŞİTLİ UZAY-ZAMANLAR İÇİN FARKLI ENERJİ MOMENTUM İFADELERİNİN ARAŞTIRILMASI, 2010 - 2012

TARHAN İ., AYGÜN S., Project Supported by Higher Education Institutions, Kaynaklı skaler Alan içeren bazı evren modülleri ve kozmolojik Özellikleri, 2007 - 2011

TARHAN İ., VARLIKLI N., AYGÜN S., AYGÜN M., Project Supported by Higher Education Institutions, Viskoz Akışkan Dolu Bir Evrenin Bazı Özellikleri ve Kozmolojik Evrimi, 2005 - 2007

YILMAZ İ., BAYSAL H., ULU DOĞRU M., AYGÜN S., TUNCEL S., Project Supported by Higher Education Institutions,

Karadelik Çözümleri, 2003 - 2005

## Activities in Scientific Journals

Physics & Astronomy International Journal, Assistant Editor/Section Editor, 2019 - Continues

Advanced Calculation and Analysis, Committee Member, 2019 - Continues

International Journal of Mathematics and Systems Science, Editor, 2018 - Continues

International Journal of Mathematical Physics, Assistant Editor/Section Editor, 2018 - Continues

## Memberships / Tasks in Scientific Organizations

Ç.O.M.U. Astrofizik Araştırma Merkezi, Principal Member, 2003 - Continues, Turkey

## Peer Reviews in Scientific Publications

NEW ASTRONOMY, SCI Journal, August 2023

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY, TRANSACTION A: SCIENCE, SCI Journal, May 2022

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY, TRANSACTION A: SCIENCE, SCI Journal, April 2022

Results in Physics, SCI Journal, April 2022

GRAVITATION AND COSMOLOGY, SCI Journal, March 2022

NEW ASTRONOMY, SCI Journal, March 2022

Cumhuriyet Science Journal, National Scientific Refreed Journal, July 2019

Modern Physics Letters A, SCI Journal, May 2019

Modern Physics Letters A, SCI Journal, January 2019

Indian Journal of Physics, SCI Journal, October 2018

canadian journal of physics, SCI Journal, August 2018

Result in physics, Other Indexed Journal, May 2018

Chinese journal of physics, SCI Journal, March 2018

Gravitation and Cosmology, SCI Journal, January 2018

## Metrics

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H-Index (Scopus): 14

## Non Academic Experience

University, Roma Tre University, Rome Tre University Science Department, Erasmus Exchange Program