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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2004 - 2009

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), Turkey 2001 - 2004

Undergraduate, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1997 - 2001

Dissertations

Doctorate, Geometrik kuantum mekaniği ve gözlenebilirlerin cebirsel yapıları, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2009

Postgraduate, Clifford cebirleri ve fizikteki uygulamaları, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), 2004

Academic Titles / Tasks

Associate Professor, Ankara University, Fen Fakültesi, Fizik Bölümü, 2020 - Continues

Research Assistant PhD, Ankara University, Fen Fakültesi, Fizik Bölümü, 2009 - 2020

Researcher, The University of Lancaster, Department of Physics, 2015 - 2016

Research Assistant, Ankara University, Fen Fakültesi, Fizik Bölümü, 2002 - 2009

Courses

Fizikte Diferensiyel Geometrik ve Topolojik Yöntemler, Doctorate, 2018 - 2019

Fizik I, Undergraduate, 2018 - 2019

GRAVİTASYON VE KOZMOLOJİ, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014

SİCİM KURAMINA GİRİŞ, Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014

Fizik 2 (Elektromagnetizma), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Fizik 1 (Mekanik), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Advising Theses

AÇIK Ö., Extrinsic spin geometry of spacetime hypesurfaces and membranes, Postgraduate, A.ÇATALKAYA(Student),

2020
AÇIK Ö., Spin geometry, calibrations and superalgebras, Postgraduate, Ö.SÜTEMEN(Student), 2020

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Generalized symmetry superalgebras**
AÇIK Ö., Ertem U.
JOURNAL OF MATHEMATICAL PHYSICS, vol.62, no.5, 2021 (SCI-Expanded)

II. **Choices of spinor inner products on M-theory backgrounds**
Ertem U., Suetemen O., Acik Ö., Catalkaya A.
NUCLEAR PHYSICS B, 2020 (SCI-Expanded)

III. **Motion of membranes in space-times with torsion**
AÇIK Ö., Catalkaya A., Ertem U., Sutemen O.
CLASSICAL AND QUANTUM GRAVITY, vol.36, no.19, 2019 (SCI-Expanded)

IV. **Spin raising and lowering operators for Rarita-Schwinger fields**
AÇIK Ö., Ertem U.
PHYSICAL REVIEW D, vol.98, no.6, 2018 (SCI-Expanded)

V. **Spin-1/2 and spin-3/2 field solutions in plane wave spacetimes**
AÇIK Ö.
GENERAL RELATIVITY AND GRAVITATION, vol.50, no.3, 2018 (SCI-Expanded)

VI. **Field equations from Killing spinors**
AÇIK Ö.
JOURNAL OF MATHEMATICAL PHYSICS, vol.59, no.2, 2018 (SCI-Expanded)

VII. **Transgression Field Theory at the Interface of Topological Insulators**
AÇIK Ö., Ertem U.
ADVANCES IN APPLIED CLIFFORD ALGEBRAS, vol.27, no.3, pp.2235-2245, 2017 (SCI-Expanded)

VIII. **Hidden symmetries and Lie algebra structures from geometric and supergravity Killing spinors**
Acik Ö., Ertem U.
CLASSICAL AND QUANTUM GRAVITY, no.16, 2016 (SCI-Expanded)

IX. **Higher-degree Dirac currents of twistor and Killing spinors in supergravity theories**
AÇIK Ö., Ertem U.
CLASSICAL AND QUANTUM GRAVITY, vol.32, no.17, 2015 (SCI-Expanded)

X. **Couplings of gravitational currents with Chern-Simons gravities**
Ertem Ü., AÇIK Ö.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.87, no.4, 2013 (SCI-Expanded)

XI. **Generalized Chern-Simons modified gravity in first-order formalism**
Ertem Ü., AÇIK Ö.
General Relativity and Gravitation, vol.45, no.2, pp.477-488, 2013 (SCI-Expanded)

XII. **Basic gravitational currents and Killing-Yano forms**
Acik Ö., Ertem U., Onder M., VERÇİN A.
GENERAL RELATIVITY AND GRAVITATION, no.11, pp.2543-2559, 2010 (SCI-Expanded)

XIII. **Killing-Yano forms of a class of spherically symmetric space-times: A unified generation of higher forms**
Acik Ö., Ertem U., Onder M., Vercin A.
JOURNAL OF MATHEMATICAL PHYSICS, no.2, 2010 (SCI-Expanded)

XIV. **First-order symmetries of the Dirac equation in a curved background: a unified dynamical symmetry condition**
Acik Ö., Ertem U., Oender M., Vercin A.
CLASSICAL AND QUANTUM GRAVITY, no.7, 2009 (SCI-Expanded)

Articles Published in Other Journals

I. **On a Relation Between Twistors and Killing Spinors**
AÇIK Ö.
Cumhuriyet Science Journal, 2018 (Peer-Reviewed Journal)

II. **Twistors from Killing Spinors alias Radiation from Pair Annihilation I: Theoretical Considerations**
AÇIK Ö.
arxiv, 2017 (Non Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Field equations from geometric Killing spinors**
AÇIK Ö.
International scientific conference «Algebraic and geometric methodsof analysis», 31 May - 05 June 2017

II. **Higher rank Dirac currents as sources for p brane stress energy momentum tensors in background gravitational fields**
AÇIK Ö.
Recent Trends in String Theory and Related Topics, Tahran, Iran, 24 - 27 May 2016

III. **Higher degree Dirac Currents of Twistors and Killing Spinors with applications in Supergravity**
AÇIK Ö.
Quantization Dualities and Integrable Systems 14, Gazimagusa, Cyprus (Kktc), 1 - 02 May 2015

IV. **Chern Simons AdS gravities and gravitationally charged 2p branes**
AÇIK Ö., ERTEM Ü.
Humbolt Kolleg: German-Turkish Cooperation in Physics: New Challenges in Science, 11 - 13 June 2014

V. **Couplings of gravitational currents with Chern Simons gravities**
AÇIK Ö.
Quantization, Dualities and Integrable Systems 13, İstanbul, Turkey, 19 - 20 April 2014

Supported Projects

Açik Ö., Ertem Ü., TUBITAK Project, Generalized Geometry, Hidden Symmetries and Supergravity, 2023 - 2026
Açik Ö., TUBITAK Project, Distribution Theory and Spin Geometry Methods in General Relativity and String Theories, 2018 - 2020

Metrics

Publication: 21
Citation (WoS): 58
Citation (Scopus): 70
H-Index (WoS): 5
H-Index (Scopus): 5