

## Prof. BAHTİYAR ÖZGÜR SARIOĞLU

### Personal Information

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### Education Information

Doctorate, Brandeis University, United States Of America 1994 - 2000

Post Graduate, İhsan Dođramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 1991 - 1993

Under Graduate, İhsan Dođramacı Bilkent Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1987 - 1991

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Duality/Propagation Properties of Gauge Theories and Attempts at Supersymmetry Breaking in N=4 SYM, Brandeis University, 2000

Post Graduate, An Integrable Family of Monge-Ampere Equations and Their Multi-Hamiltonian Structure,, Bilkent Üniversitesi, 1993

### Research Areas

Differential Equations, Differential Geometry, Physics, Mathematical Methods in Physics, Relativity and Gravitation, Quantum Mechanics, Fields Theory and Relativity, Basic Particles and Areas

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2010 - Continues

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2006 - 2010

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2001 - 2006

Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2000 - 2001

Research Assistant, Brandeis University, Fizik Bölümü, 1994 - 1999

Research Assistant, İhsan Dođramacı Bilkent Üniversitesi, Fen Fakültesi, Matematik Bölümü, 1991 - 1994

## Advising Theses

- SARIOĞLU B. Ö. , Second-order scalar-tensor field theories, Post Graduate, E.SİNAN(Student), 2017
- SARIOĞLU B. Ö. , Anisotropic solutions for generalised holography, Doctorate, D.OLGU(Student), 2016
- SARIOĞLU B. Ö. , Killing family of tensors in classical gravitational theories, Post Graduate, Ç.MENEKAY(Student), 2013
- SARIOĞLU B. Ö. , Covariant symplectic structure and conserved charges of new massive gravity, Post Graduate, G.ALKAÇ(Student), 2012
- SARIOĞLU B. Ö. , Conserved charges of quadratic curvature gravity theories in arbitrary backgrounds, Post Graduate, D.OLGU(Student), 2010
- SARIOĞLU B. Ö. , Gödel spacetime, Post Graduate, M.KAVUK(Student), 2005
- SARIOĞLU B. Ö. , Dualisation of supergravity theories, Doctorate, N.TEVFİK(Student), 2004
- SARIOĞLU B. Ö. , Tunnelling time models and 'superluminality', Post Graduate, H.SEVİNÇLİ(Student), 2002

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Consistent S-3 reductions of six-dimensional supergravity**  
Samtleben H., Sarioglu O.  
PHYSICAL REVIEW D, vol.100, 2019 (Journal Indexed in SCI)
- **Circularly symmetric solutions of minimal massive gravity at its merger point**  
SARIOĞLU B. Ö.  
CLASSICAL AND QUANTUM GRAVITY, vol.36, 2019 (Journal Indexed in SCI)
- **Stationary Lifshitz black hole of New Massive Gravity**  
SARIOĞLU B. Ö.  
CLASSICAL AND QUANTUM GRAVITY, vol.36, 2019 (Journal Indexed in SCI)
- **Supersymmetric solutions of  $N = (1,1)$  general massive supergravity**  
DEĞER N. S. , Nazari Z., SARIOĞLU B. Ö.  
PHYSICAL REVIEW D, vol.97, 2018 (Journal Indexed in SCI)
- **Kundt solutions of minimal massive 3D gravity**  
DEĞER N. S. , SARIOĞLU B. Ö.  
PHYSICAL REVIEW D, vol.92, 2015 (Journal Indexed in SCI)
- **All timelike supersymmetric solutions of three-dimensional half-maximal supergravity**  
DEĞER N. S. , Moutsopoulos G., Samtleben H., SARIOĞLU B. Ö.  
JOURNAL OF HIGH ENERGY PHYSICS, 2015 (Journal Indexed in SCI)
- **A supersymmetric reduction on the three-sphere**  
DEĞER N. S. , Samtleben H., SARIOĞLU B. Ö. , Van den Bleeken D.  
NUCLEAR PHYSICS B, vol.890, pp.350-362, 2015 (Journal Indexed in SCI)
- **Stationary Lifshitz black holes of R-2-corrected gravity theory**  
SARIOĞLU B. Ö.  
PHYSICAL REVIEW D, vol.84, 2011 (Journal Indexed in SCI)
- **Thermodynamics of Lifshitz black holes**  
Devencioglu D. O. , SARIOĞLU B. Ö.  
PHYSICAL REVIEW D, vol.83, 2011 (Journal Indexed in SCI)
- **Conserved Killing charges of quadratic curvature gravity theories in arbitrary backgrounds**  
Devencioglu D. O. , SARIOĞLU B. Ö.  
PHYSICAL REVIEW D, vol.83, 2011 (Journal Indexed in SCI)
- **On the supersymmetric solutions of  $D=3$  half-maximal supergravities**  
DEĞER N. S. , Samtleben H., SARIOĞLU B. Ö.  
NUCLEAR PHYSICS B, vol.840, pp.29-53, 2010 (Journal Indexed in SCI)
- **Self-dual solutions of Yang-Mills theory on Euclidean AdS space**  
SARIOĞLU B. Ö. , TEKİN B.  
PHYSICAL REVIEW D, vol.79, 2009 (Journal Indexed in SCI)

- **Note on cosmological Levi-Civita spacetimes in higher dimensions**  
SARIOĞLU B. Ö. , TEKİN B.  
PHYSICAL REVIEW D, vol.79, 2009 (Journal Indexed in SCI)
- **Comment on 'A second anti-de Sitter universe'**  
SARIOĞLU B. Ö. , TEKİN B.  
CLASSICAL AND QUANTUM GRAVITY, vol.26, 2009 (Journal Indexed in SCI)
- **Finite mass gravitating Yang monopoles**  
CEBECİ H., Sarioglu O., TEKİN B.  
PHYSICAL REVIEW D, vol.78, 2008 (Journal Indexed in SCI)
- **Cotton flow**  
Kisisel A. U. O. , Sarioglu O., TEKİN B.  
CLASSICAL AND QUANTUM GRAVITY, vol.25, 2008 (Journal Indexed in SCI)
- **Spherically symmetric solutions of Einstein plus non-polynomial gravities**  
Deser S., Sarioglu O., TEKİN B.  
GENERAL RELATIVITY AND GRAVITATION, vol.40, pp.1-7, 2008 (Journal Indexed in SCI)
- **Topologically massive gravity as a Pais-Uhlenbeck oscillator**  
Sarioglu O., Tekin B.  
CLASSICAL AND QUANTUM GRAVITY, vol.23, pp.7541-7549, 2006 (Journal Indexed in SCI)
- **Gravitational charges of transverse asymptotically AdS spacetimes**  
Cebeci H., Sarioglu O., Tekin B.  
PHYSICAL REVIEW D, vol.74, 2006 (Journal Indexed in SCI)
- **Closed timelike curves and geodesics of Godel-type metrics**  
Gleiser R., Gurses M., Karasu A., Sarioglu O.  
CLASSICAL AND QUANTUM GRAVITY, vol.23, pp.2653-2663, 2006 (Journal Indexed in SCI)
- **Negative mass solitons in gravity**  
Cebeci H., Sarioglu O., Tekin B.  
PHYSICAL REVIEW D, vol.73, 2006 (Journal Indexed in SCI)
- **New supersymmetric solutions in N=2 matter coupled AdS(3) supergravities**  
DEĞER N. S. , SARIOĞLU B. Ö.  
JOURNAL OF HIGH ENERGY PHYSICS, 2006 (Journal Indexed in SCI)
- **Accelerated Levi-Civita-Bertotti-Robinson metric in D dimensions**  
Gurses M., Sarioglu O.  
GENERAL RELATIVITY AND GRAVITATION, vol.37, pp.2015-2022, 2005 (Journal Indexed in SCI)
- **Godel-type metrics in various dimensions: II. Inclusion of a dilaton field**  
Gurses M., Sarioglu O.  
CLASSICAL AND QUANTUM GRAVITY, vol.22, pp.4699-4713, 2005 (Journal Indexed in SCI)
- **Mass and angular momentum of asymptotically AdS or flat solutions in the topologically massive gravity**  
Olmez S., Sarioglu O., Tekin B.  
CLASSICAL AND QUANTUM GRAVITY, vol.22, pp.4355-4361, 2005 (Journal Indexed in SCI)
- **Godel-type metrics in various dimensions**  
Gurses M., Karasu A., Sarioglu O.  
CLASSICAL AND QUANTUM GRAVITY, vol.22, pp.1527-1543, 2005 (Journal Indexed in SCI)
- **Some further properties of the accelerated Kerr-Schild metrics**  
Gurses M., Sarioglu O.  
GENERAL RELATIVITY AND GRAVITATION, vol.36, pp.403-410, 2004 (Journal Indexed in SCI)
- **Supersymmetric strings and waves in D=3, N=2 matter coupled gauged supergravities**  
DEĞER N. S. , SARIOĞLU B. Ö.  
JOURNAL OF HIGH ENERGY PHYSICS, 2004 (Journal Indexed in SCI)
- **Lienard-Wiechert potentials in even dimensions**  
Gurses M., Sarioglu O.

- JOURNAL OF MATHEMATICAL PHYSICS, vol.44, pp.4672-4680, 2003 (Journal Indexed in SCI)  
**Accelerated Born-Infeld metrics in Kerr-Schild geometry**  
GÜRSES M., SARIOĞLU B. Ö.
- CLASSICAL AND QUANTUM GRAVITY, vol.20, pp.351-358, 2003 (Journal Indexed in SCI)  
**Lienard-Wiechert potentials of a non-Abelian Yang-Mills charge**  
Sarioglu O.
- PHYSICAL REVIEW D, vol.66, 2002 (Journal Indexed in SCI)  
**Accelerated charge Kerr-Schild metrics in D dimensions**  
GÜRSES M., SARIOĞLU B. Ö.
- CLASSICAL AND QUANTUM GRAVITY, vol.19, pp.4249-4261, 2002 (Journal Indexed in SCI)  
**Supersymmetric solutions to topologically massive gravity and black holes in three dimensions**  
Derehi T., Sarioglu O.
- PHYSICAL REVIEW D, vol.64, 2001 (Journal Indexed in SCI)  
**"Self dual" solutions of topologically massive gravity coupled with the Maxwell-Chern-Simons theory**  
Derehi T., Sarioglu O.
- PHYSICS LETTERS B, vol.492, pp.339-343, 2000 (Journal Indexed in SCI)  
**Shock-free wave propagation in gauge theories**  
McCarthy J., SARIOĞLU B. Ö.
- INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.39, pp.159-182, 2000 (Journal Indexed in SCI)  
**'Good propagation' and duality invariance constraints on scalar, gauge vector and gravity actions**  
Deser S., McCarthy J., SARIOĞLU B. Ö.
- CLASSICAL AND QUANTUM GRAVITY, vol.16, pp.841-847, 1999 (Journal Indexed in SCI)  
**Hamiltonian electric/magnetic duality and Lorentz invariance**  
Deser S., SARIOĞLU B. Ö.
- Physics Letters B, vol.423, pp.369-372, 1998 (Journal Indexed in SCI)  
**AN INTEGRABLE FAMILY OF MONGE-AMPERE EQUATIONS AND THEIR MULTI-HAMILTONIAN STRUCTURE**  
NUTKU Y., SARIOĞLU B. Ö.
- Physics Letters A, vol.173, pp.270-274, 1993 (Journal Indexed in SCI)

## Books & Book Chapters

- **Philosophical Concepts in Physics, The Historical Relation between Philosophy and Scientific Theories**  
Sarioğlu B. Ö.  
Sabancı Üniversitesi Yayinevi, İstanbul, 2006
- **Philosophical Concepts in Physics, The Historical Relation between Philosophy and Scientific Theories**  
Sarioğlu B. Ö.  
Sabancı Üniversitesi Yayinevi, İstanbul, 2003

## Citations

Total Citations (WOS):379

h-index (WOS):13

## Awards

Sariođlu B. Ö. , TU'BA University Textbooks Award Program - Best Translation Award in Natural Sciences, Tüba,  
December 2009

Sariođlu B. Ö. , TU'BI'TAK-TWAS Incentive Award, Tübitak, December 2007