

CURRICULUM VITAE

Bahtiyar Özgür Sarıoğlu

Personal Data:

Name: Bahtiyar Özgür Sarıoğlu
Birth: August 3, 1969 in Akhisar/Manisa, Turkey
Nationality: Turkish
Marital status: Married with twin daughters

Contact Information:

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Education:

Institution and Location	Degree	Year Conferred	Field of Study
Bilkent University, Ankara, Turkey	B.Sc.	June 1991	Electrical & Electronics Eng.
Bilkent University, Ankara, Turkey	M.Sc.	June 1993	Mathematics
Brandeis University, Waltham, MA, USA	Ph.D.	February 2000*	Physics

*: Ph.D. thesis defended successfully on September 7, 1999.

Theses:

◇ *An Integrable Family of Monge-Ampère Equations and Their Multi-Hamiltonian Structure*, Bilkent University, June 1993, (thesis advisor: Prof. Dr. Yavuz Nutku).

◇ *Duality/Propagation Properties of Gauge Theories and Attempts at Supersymmetry Breaking in $\mathcal{N} = 4$ SYM*, Brandeis University, February 2000, (thesis advisor: Prof. Stanley Deser).

Academic Honors:

◇ Recipient of the SSHN (Séjour Scientifique de Haut Niveau) scholarship award sponsored by the French Embassy of Turkey for 2018.

◇ Recipient of the TÜBA University Textbooks Award Program - Best Translation Award in Natural Sciences for 2009.

◇ Recipient of the TÜBİTAK-TWAS Incentive Award for 2007.

- ◇ Associate Professorship entitled by YÖK in April 2004.
- ◇ Recipient of the David L. Falkoff Graduate School Prize Award for 1995-96.
- ◇ Teaching assistantship (covering full tuition and including a monthly stipend) by Brandeis University, from September 1994 to August 1999.
- ◇ Teaching assistantship (covering full tuition, accommodations and a monthly salary) by Bilkent University, from September 1991 to July 1994.
- ◇ Fellowship (covering full tuition, food and accommodations, and a monthly stipend) by Bilkent University, from September 1987 to June 1991.

Employment and Experience:

- ◇ Professor in the Physics Dept. of METU, Ankara, since October 2010.
- ◇ Associate Professor in the Physics Dept. of METU, Ankara, from October 2006 to October 2010.
- ◇ Assistant Professor in the Physics Dept. of METU, Ankara, from June 2001 to October 2006.
- ◇ Instructor in the Physics Dept. of METU, Ankara, from January 2000 to June 2001.
- ◇ Full time graduate student in the Physics Dept. of Brandeis University, from September 1994 to August 1999.
- ◇ Full time graduate student in the Mathematics Dept. of Bilkent University, from September 1991 to July 1994.
- ◇ Visiting researcher at CBPF in Rio de Janeiro, Brazil, from October 1993 to November 1993.

Schools and Conferences:

- ◇ *Supersymmetries and Quantum Symmetries – SQS'19*, Yerevan, Armenia, August 26-31, 2019.
- ◇ *Recent Developments in Symmetries and (Super)gravity Theories*, IMBM, İstanbul, June 13-15, 2016.
- ◇ Organizer for *Recent Developments in Supergravity Theories*, IMBM, İstanbul, June 18-20, 2014.
- ◇ *Quantum Aspects of Black Holes and its Recent Progress*, Yerevan, Armenia, September 24-26, 2013.
- ◇ *Spanish-Portuguese Relativity Meeting ERE 2013*, Benasque, Spain, September 9-13, 2013.
- ◇ *Open Questions in an Open Universe*, IMBM, İstanbul, August 12-17, 2013.
- ◇ *Strings, Branes and Supergravity*, Koç University, İstanbul, August 1-5, 2011.
- ◇ *Spanish Relativity Meeting ERE 2008, Physics and Mathematics of Gravitation*, Salamanca, Spain, September 15-19, 2008.
- ◇ *İstanbul 2007: Strings, Branes and Cosmology*, Koç University, İstanbul, July 9-13, 2007.
- ◇ Organizer for *Workshop on Quantization, Dualities and Integrable Systems VI*, Middle East Technical University, Ankara, April 20-22, 2007.
- ◇ *11th Marcel Grossmann Meeting*, Berlin, Germany, July 23-29, 2006.

◇ *XXVIII Spanish Relativity Meeting ERE 2005, A Century of Relativity Physics*, Oviedo, Spain, September 6-10, 2005.

◇ *Symmetry in Nonlinear Mathematical Physics VI*, Kiev, Ukraine, June 20-26, 2005.

◇ *Mini-Workshop on Quantization, Dualities and Integrable Systems IV*, Abant İzzet Baysal University, Bolu, February 1-4, 2005.

◇ Organizer for *Mini-Workshop on Quantization, Dualities and Integrable Systems III*, Middle East Technical University, Ankara, February 13-14, 2004.

◇ *Mini-Workshop on Quantization, Dualities and Integrable Systems II*, Koç University, İstanbul, February 7-8, 2003.

◇ *Gürsey Memorial Conference II, M-Theory and Dualities*, İstanbul, June 19-23, 2000.

◇ *TASI '97, Supersymmetry, Supergravity and Supercolliders*, Boulder, CO, June 1997.

◇ *NATO ASI on Real and Complex Dynamical Systems*, Denmark, June 1993.

◇ *NATO ARW on Applications of Analytical and Geometrical Methods to Nonlinear Differential Equations*, England, July 1992.

◇ *Differential Geometry and Topology on 4-Manifolds*, Gökova, Turkey, June 1992.

Grants:

◇ TÜBİTAK-2236 (*mentor* for Prof. Ulf Lindström): *Geometry and High Energy Structures* (120C067), November 2020-2022.

◇ TÜBİTAK-1001 (with N.S. Değer): *Supersymmetric Solutions of Three Dimensional Supergravities* (116F137), February 2017-2020.

◇ TÜBİTAK-1001 (with N.S. Değer): *3-Dimensional Gauged Supergravities* (113F034), September 2013-2016.

List of Publications (at INSPIRE-HEP):

1. O. Günel and Ö. Sarıoğlu, *Eur. Phys. J. C* **83**, 787 (2023) doi:10.1140/epjc/s10052-023-11916-x [arXiv:2305.08453 [gr-qc]].
2. O. Günel, U. Lindström and Ö. Sarıoğlu, *Phys. Lett. B* **839**, 137784 (2023) doi:10.1016/j.physletb.2023.137784 [arXiv:2301.03339 [gr-qc]].
3. U. Lindström and Ö. Sarıoğlu, *Phys. Lett. B* **836**, 137619 (2023) doi:10.1016/j.physletb.2022.137619 [arXiv:2211.12327 [gr-qc]].
4. U. Lindström and Ö. Sarıoğlu, *Class. Quant. Grav.* **40**, no.8, 085003 (2023) doi:10.1088/1361-6382/acc22f [arXiv:2210.10383 [gr-qc]].
5. U. Lindström and Ö. Sarıoğlu, *JHEP* **05**, 176 (2023) doi:10.1007/JHEP05(2023)176 [arXiv:2206.08037 [gr-qc]].
6. U. Lindström and Ö. Sarıoğlu, *PoS CORFU2021*, 149 (2022) doi:10.22323/1.406.0149 [arXiv:2202.07226 [hep-th]].

7. U. Lindström and Ö. Sarioğlu, *Phys. Lett. B* **829**, 137088 (2022) doi:10.1016/j.physletb.2022.137088 [arXiv:2202.06542 [hep-th]].
8. U. Lindström and Ö. Sarioğlu, *JHEP* **03**, 029 (2022) doi:10.1007/JHEP03(2022)029 [arXiv:2110.03470 [hep-th]].
9. U. Lindström and Ö. Sarioğlu, *Class. Quant. Grav.* **38**, no.19, 195011 (2021) doi:10.1088/1361-6382/ac1871 [arXiv:2104.12451 [hep-th]].
10. H. Samtleben and Ö. Sarioglu, *Phys. Rev. D* **100**, no.8, 086002 (2019) doi:10.1103/PhysRevD.100.086002 [arXiv:1907.08413 [hep-th]].
11. Ö. Sarioğlu, *Class. Quant. Grav.* **36**, no.14, 145005 (2019) doi:10.1088/1361-6382/ab28c4 [arXiv:1901.09538 [gr-qc]].
12. Ö. Sarioğlu, *Class. Quant. Grav.* **36**, no.1, 015015 (2019) doi:10.1088/1361-6382/aaf444 [arXiv:1806.10811 [gr-qc]].
13. N. S. Deger, Z. Nazari and O. Sarioglu, *Phys. Rev. D* **97**, no.10, 106022 (2018) doi:10.1103/PhysRevD.97.106022 [arXiv:1803.06926 [hep-th]].
14. N. S. Deger and Ö. Sarioğlu, *Phys. Rev. D* **92**, no.10, 104015 (2015) doi:10.1103/PhysRevD.92.104015 [arXiv:1505.03387 [hep-th]].
15. N. S. Deger, G. Moutsopoulos, H. Samtleben and Ö. Sarioğlu, *JHEP* **06**, 147 (2015) doi:10.1007/JHEP06(2015)147 [arXiv:1503.09146 [hep-th]].
16. N. S. Deger, H. Samtleben, O. Sarioglu and D. Van den Bleeken, *Nucl. Phys. B* **890**, 350-362 (2014) doi:10.1016/j.nuclphysb.2014.11.014 [arXiv:1410.7168 [hep-th]].
17. O. Sarioglu, *Phys. Rev. D* **84**, 127501 (2011) doi:10.1103/PhysRevD.84.127501 [arXiv:1109.4721 [hep-th]].
18. D. O. Devecioglu and O. Sarioglu, *Phys. Rev. D* **83**, 124041 (2011) doi:10.1103/PhysRevD.83.124041 [arXiv:1103.1993 [hep-th]].
19. D. O. Devecioglu and O. Sarioglu, *Phys. Rev. D* **83**, 021503 (2011) doi:10.1103/PhysRevD.83.021503 [arXiv:1010.1711 [hep-th]].
20. N. S. Deger, H. Samtleben and O. Sarioglu, *Nucl. Phys. B* **840**, 29-53 (2010) doi:10.1016/j.nuclphysb.2010.06.001 [arXiv:1003.3119 [hep-th]].
21. O. Sarioglu and B. Tekin, *Phys. Rev. D* **79**, 104024 (2009) doi:10.1103/PhysRevD.79.104024 [arXiv:0903.3803 [hep-th]].
22. O. Sarioglu and B. Tekin, *Phys. Rev. D* **79**, 087502 (2009) doi:10.1103/PhysRevD.79.087502 [arXiv:0901.1242 [gr-qc]].

23. O. Sarioglu and B. Tekin, *Class. Quant. Grav.* **26**, 048001 (2009) doi:10.1088/0264-9381/26/4/048001 [arXiv:0811.3683 [gr-qc]].
24. H. Cebeci, O. Sarioglu and B. Tekin, *Phys. Rev. D* **78**, 125016 (2008) doi:10.1103/PhysRevD.78.125016 [arXiv:0809.0806 [hep-th]].
25. A. U. O. Kisisel, O. Sarioglu and B. Tekin, *Class. Quant. Grav.* **25**, 165019 (2008) doi:10.1088/0264-9381/25/16/165019 [arXiv:0803.1603 [hep-th]].
26. O. Sarioglu and B. Tekin, [arXiv:0709.0407 [gr-qc]].
27. S. Deser, O. Sarioglu and B. Tekin, *Gen. Rel. Grav.* **40**, 1-7 (2008) doi:10.1007/s10714-007-0508-1 [arXiv:0705.1669 [gr-qc]].
28. H. Cebeci, O. Sarioglu and B. Tekin, *Phys. Rev. D* **74**, 124021 (2006) doi:10.1103/PhysRevD.74.124021 [arXiv:hep-th/0611011 [hep-th]].
29. O. Sarioglu and B. Tekin, *Class. Quant. Grav.* **23**, 7541-7550 (2006) doi:10.1088/0264-9381/23/24/023 [arXiv:gr-qc/0608085 [gr-qc]].
30. N. S. Deger and O. Sarioglu, *JHEP* **08**, 078 (2006) doi:10.1088/1126-6708/2006/08/078 [arXiv:hep-th/0605098 [hep-th]].
31. H. Cebeci, O. Sarioglu and B. Tekin, *Phys. Rev. D* **73**, 064020 (2006) doi:10.1103/PhysRevD.73.064020 [arXiv:hep-th/0602117 [hep-th]].
32. R. J. Gleiser, M. Gurses, A. Karasu and O. Sarioglu, *Class. Quant. Grav.* **23**, 2653-2664 (2006) doi:10.1088/0264-9381/23/7/025 [arXiv:gr-qc/0512037 [gr-qc]].
33. S. Olmez, O. Sarioglu and B. Tekin, *Class. Quant. Grav.* **22**, 4355-4362 (2005) doi:10.1088/0264-9381/22/20/014 [arXiv:gr-qc/0507003 [gr-qc]].
34. M. Gurses and O. Sarioglu, *Class. Quant. Grav.* **22**, 4699-4714 (2005) doi:10.1088/0264-9381/22/22/004 [arXiv:hep-th/0505268 [hep-th]].
35. M. Gurses and O. Sarioglu, *Gen. Rel. Grav.* **37**, 2015-2022 (2005) doi:10.1007/s10714-005-0176-y [arXiv:gr-qc/0502035 [gr-qc]].
36. N. S. Deger and O. Sarioglu, *JHEP* **12**, 039 (2004) doi:10.1088/1126-6708/2004/12/039 [arXiv:hep-th/0409169 [hep-th]].
37. M. Gurses, A. Karasu and O. Sarioglu, *Class. Quant. Grav.* **22**, 1527-1543 (2005) doi:10.1088/0264-9381/22/9/003 [arXiv:hep-th/0312290 [hep-th]].
38. M. Gurses and O. Sarioglu, *Gen. Rel. Grav.* **36**, 403-410 (2004) doi:10.1023/B:GERG.0000010484.24510.6d [arXiv:gr-qc/0308020 [gr-qc]].

39. M. Gurses and O. Sarioglu, J. Math. Phys. **44**, 4672-4680 (2003) doi:10.1063/1.1613040 [arXiv:hep-th/0303078 [hep-th]].
40. M. Gurses and O. Sarioglu, Class. Quant. Grav. **20**, 351-358 (2003) doi:10.1088/0264-9381/20/2/308 [arXiv:gr-qc/0207083 [gr-qc]].
41. O. Sarioglu, Phys. Rev. D **66**, 085005 (2002) doi:10.1103/PhysRevD.66.085005 [arXiv:hep-th/0207227 [hep-th]].
42. M. Gurses and O. Sarioglu, Class. Quant. Grav. **19**, 4249-4262 (2002) [erratum: Class. Quant. Grav. **20**, 1413-1414 (2003)] doi:10.1088/0264-9381/19/16/302 [arXiv:gr-qc/0203097 [gr-qc]].
43. T. Dereli and O. Sarioglu, Phys. Rev. D **64**, 027501 (2001) doi:10.1103/PhysRevD.64.027501
44. T. Dereli and O. Sarioglu, [arXiv:gr-qc/0009082 [gr-qc]].
45. T. Dereli and O. Sarioglu, Phys. Lett. B **492**, 339-343 (2000) doi:10.1016/S0370-2693(00)01098-4 [arXiv:gr-qc/0009090 [gr-qc]].
46. B. O. Sarioglu, UMI-99-59652.
47. J. G. McCarthy and O. Sarioglu, Int. J. Theor. Phys. **39**, 159-182 (2000) doi:10.1023/A:1003659520136 [arXiv:math-ph/9902004 [math-ph]].
48. S. Deser, J. G. McCarthy and O. Sarioglu, Class. Quant. Grav. **16**, 841-847 (1999) doi:10.1088/0264-9381/16/3/015 [arXiv:hep-th/9809153 [hep-th]].
49. S. Deser and O. Sarioglu, Phys. Lett. B **423**, 369-372 (1998) doi:10.1016/S0370-2693(98)00163-4 [arXiv:hep-th/9712067 [hep-th]].
50. Y. Nutku and O. Sarioglu, Phys. Lett. A **173**, 270-274 (1993) doi:10.1016/0375-9601(93)90277-7

Referee for the Following Journals:

Physical Review Letters, Physical Review **D**, Journal of High Energy Physics (JHEP), Classical and Quantum Gravity, SIGMA, Physica Scripta, European Physical Journal C, Turkish Journal of Mathematics, Turkish Journal of Physics.

Books Translated (from English):

The Original Work:

James T. Cushing, *Philosophical Concepts in Physics, The Historical Relation between Philosophy and Scientific Theories*, (Cambridge: Cambridge University Press, 2000), ISBN: 0 521 57823 X (pbk.)

1) *Fizikte Felsefi Kavramlar, Felsefe ve Bilimsel Kuramlar Arasındaki Tarihsel İlişki*, Vol.1, (İstanbul: Sabancı University Press, 2003), ISBN: 975-8362-29-1.

2) *Fizikte Felsefi Kavramlar, Felsefe ve Bilimsel Kuramlar Arasındaki Tarihsel İlişki*, Vol.2, (İstanbul: Sabancı University Press, 2006), ISBN: 975-8362-57-7.

Ph. D. Theses Supervised:

- Nejat Tevfik Yılmaz, *Dualisation of supergravity theories*, 2004. (supervised with Prof.Dr. Tekin Dereli)
- Deniz Olgu Devocioğlu, *Anisotropic solutions for generalised holography*, 2016.

M. Sc. Theses Supervised:

- Haldun Sevinçli, *Tunneling time models and ‘superluminality’*, 2002.
- Mehmet Kavuk, *Gödel spacetime*, 2005.
- Deniz Olgu Devocioğlu, *Conserved charges of quadratic curvature gravity theories in arbitrary backgrounds*, 2010.
- Gökhan Alkaç, *Covariant symplectic structure and conserved charges of New Massive Gravity*, 2012.
- Çağatay Menekay, *Killing family of tensors in classical gravitational theories*, 2013.
- Ertan Sinan Şahin, *Second-order scalar-tensor field theories*, 2017.
- Salman Eren Altun, *Knotted solutions of Maxwell equations*, 2019.
- Büşra Dedeoğlu, *3D Chern-Simons-like gravity models for $N = 2, 3, 4$* , 2022.
- Okan Günel, *Killing family of tensors and hidden symmetries*, 2022.
- Günseli Çetin, *On the finite perimeter sets of sub-Lorentzian metric spaces*, 2022.
- Rasim Yılmaz, *Double field theory and its applications*, 2023.

Courses Given at METU:

- Phys 105, General Physics I
- Phys 106, General Physics II
- Phys 111, Physics I (Mechanics)
- Phys 112, Physics II (Electricity and Magnetism)
- Phys 209, Mathematical Methods in Physics I (for “special physics” and “regular” programs)

- Phys 210, Mathematical Methods in Physics II (for “special physics” and “regular” programs)
- Phys 311, Classical Mechanics (for special physics program)
- Phys 331, Electromagnetic Theory I
- Phys 332, Electromagnetic Theory II
- Phys 400, Special Problems in Physics
- Phys 415, Projects in Physics
- Phys 416, Advanced Selected Problems in Physics
- Phys 434, Mathematical Methods in Physics III
- Phys 481, Special Relativity (former name: “Theory of Relativity I”)
- Phys 482, General Relativity (former name: “Theory of Relativity II”)
- Phys 491, Geometry and Topology in Physics I
- Phys 492, Geometry and Topology in Physics II
- Phys 493, Special Functions for Physicists
- Phys 503, Methods of Mathematical Physics I
- Phys 504, Methods of Mathematical Physics II
- Phys 505, Electromagnetic Theory I
- Phys 506, Electromagnetic Theory II
- Math 260, Basic Linear Algebra