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PERSONAL

Date of Birth	01.02.1984
Place of Birth	Çınar

EDUCATION

2015-2016	MIT-Massachusetts Institute of Technology, Cambridge, USA, POSTDOC.
2014-2015	METU-Middle East Technical University, Department of Physics, POSTDOC.
2011-2014	METU-Middle East Technical University, Department of Physics, Ph.D.
2009-2011	METU-Middle East Technical University, Department of Physics, M.S.
2003-2008	Hacettepe University, Department of Physics Engineering, B.S.

ACADEMIC POSITIONS

February/2026-Present	Professor, Department of Electrical and Electronics Engineering, Atılım University, Turkey
September/2024-January/2026	Associate Professor, OstimTech., Department of Computer Engineering, Turkey
January/2018-August/2024	Assistant Professor and Associate Professor, UTAA, Department of Mechanical Engineering, Turkey

ADMINISTRATIVE DUTIES

February/2025-October/2025	Member of the Engineering Faculty Governance Committee, OstimTech.
June/2020-December/2023	Director of Graduate School of Natural and Applied Sciences, UTAA
2021-2024	Member of the Engineering Faculty Governance Committee, UTAA
2018-2022	Physics Group Coordinator, UTAA
June/2020-December/2023	University Ethics Committee Member, UTAA

RESEARCH INTERESTS

1	Electromagnetism
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2	Models of (quantum) gravity
3	Holographic information
4	High energy particle interactions

PUBLICATIONS

1	Sucu, E., Dengiz, S. , and Sakalli, I. "Quantum-Corrected Thermodynamics of Conformal Weyl Gravity Black Holes: GUP Effects and Phase Transitions," e-Print: 2508.00203. (Under Review, 2026)
2	Sucu, E., Dengiz, S. , and Sakalli, I. "Deflection of Light and Thermodynamics of Einstein-Dyonic-ModMax Black Holes under GUP and Plasma Effects," e-Print: 2508.06725. (Under Review, 2026)
3	Dengiz, S. and Sakalli, I. "Domain Wall Skyrmions in Holographic Quantum Chromodynamics: Topological Phases and Phase Transitions," JHAP 5 (2025) 12-30. (Q2/SCI, the Honorable Mention Award in the 2025 Prizes for Letters on Holography in JHAP.)
4	Dengiz, S. "Cosmological Weyl-Einsteinian-Cubic Gravity as a Gauge Theory of Gravity," Eur. Phys. J. C, 85 (2025) 9, 928. (Q1/SCI/Nature Index, Single Author)
5	Latifinavid, M. Balıkçı, C., Dengiz, S. and Azizi, A. "Development of Aircraft Failure Prediction Using an Adaptive Neuro-Fuzzy Inference System," Journal of Applied and Computational Mechanics," DOI: 10.22055/jacm.2025.48368.5184. (In Press, 2025, Q2/SCI.)
6	Rafighi, A.M. Bilim, E.S., and Dengiz, S. "GG25 Gray Cast Iron; Carbide Insert; Surface roughness; Force; Power", 4th International Conference on Recent Advances in Mechanical Engineering Research and Development, Springer, Materials Today: Proceedings , MATPR-D-23- 04466R1 (2023). DOI: https://doi.org/10.1016/j.matpr.2023.10.136 . (Q1/SCI.)
7	Kolár, I. Tomas Malek, T., Dengiz, S. , and Kilicarlan, E. "Exact gyratons in higher and infinite derivative gravity," Phys. Rev. D 105 (2022) 4, 044018. (Q1/SCI/Nature Index.)
8	Reza Setare, M. Naseh Sajadi S., Dengiz, S. , and Kilicarlan, E. "New Chiral Generalized Minimal Massive Gravity," Phys. Rev. D 104, 066004 (2021). (Q1/SCI/Nature Index.)
9	Dengiz, S. , Kilicarlan, E., Kolár, I., and Mazumdar, A. "Impulsive waves in ghost-free infinite derivative gravity in anti-de Sitter spacetime," Phys. Rev. D 102, 044016 (2020). (Q1/SCI/Nature Index.)
10	Dengiz, S. , Kilicarlan, E., and Reza Setare, M. "Lee-Wald Charge and Asymptotic Behaviors of the Weyl-invariant Topologically Massive Gravity," Class. Quantum Grav. 37 (2020) 215016. (Q1/SCI.)
11	Bhatta, A., Chakraborty, S., Dengiz, S. , and Kilicarlan, E. "High-Temperature Behavior of Non-Local Observables of Strongly Coupled Boosted Plasma: A Holographic Study," Eur. Phys. J. C (2020) 80:663. (Q1/SCI/Nature Index.)
12	Dengiz, S. "Note on Soft Photons and Faddeev-Jackiw Symplectic Reduction of Quantum Electrodynamics in the Eikonal Limit," Int. J. Mod. Phys. A33 (2018) 1830020. (Q2/SCI, Single Author.)
13	Dengiz, S. "A Note on Noncompact and Nonmetricity Quadratic Curvature Gravity Theories," Turk J Phys, 42, (2018), 70-77. (Q3/Emerging, Single Author.)
14	Dengiz, S. "A Noncompact Weyl-Einstein-Yang-Mills Model: A Semiclassical Quantum Gravity," (MIT-CTP-4834), Annals of Physics 383 (2017) 560-578. (Q1/SCI, Single Author.)

15	Dengiz, S. "Faddeev-Jackiw Hamiltonian Reduction for Free and Gauged Rarita-Schwinger Theories,"(MIT-CTP-4768), Eur. Phys. J. C (2016) 76:566. (Q1/SCI/Nature Index, Single Author.)
16	Kilicarslan, E., Dengiz, S. and Tekin, B. "More on Cotton flow," The Journal of High Energy Physics (JHEP) 1506 (2015) 136. (Q1/SCI/Nature Index.)
17	Dengiz, S., Kilicarslan, E. and Tekin, B. "Scattering in Topologically Massive Gravity, Chiral Gravity, and the Anyon-Anyon Potential Energy," Phys. Rev. D 89, 024033 (2014). (Q1/SCI/Nature Index.)
18	Dengiz, S., Kilicarslan, E., and Tekin, B. "Weyl-gauging of Topologically Massive Gravity," Phys. Rev. D 86, 104014 (2012). (Q1/SCI/Nature Index.)
19	Reza Tanhayi, M., Dengiz, S., and Tekin, B. "Weyl-Invariant Higher Curvature Gravity Theories in n Dimensions," Phys. Rev. D 85, 064016 (2012). (Q1/SCI/Nature Index.)
20	Reza Tanhayi, M., Dengiz, S., and Tekin, B. "Unitarity of Weyl-Invariant New Massive Gravity and Generation of Graviton Mass via Symmetry Breaking," Phys. Rev. D 85, 064008 (2012). (Q1/SCI/Nature Index.)
21	Dengiz, S., and Tekin, B. "Higgs Mechanism for New Massive Gravity and Weyl-Invariant Extensions of Higher Derivative Theories," Phys. Rev. D 84, 024033 (2011). (Q1/SCI/Nature Index.)

PROJECTS

1	Exact Solutions of Infinite Derivative Gravity, TUBITAK , Project ID: 119F241, (Expert Researcher), 2019-2022
2	Cosmology of Born-Infeld-type gravity theories, TUBITAK , Project ID: 113F155, (Researcher), 2013-2015
3	Determining spin parameter of black hole system XTE J 1550-564 from the X-ray spectrum, TUBITAK , Project ID: 109T748, (Researcher), 2011-2013.

ORGANIZED JOINT CONFERENCES, MEETINGS AND WORKSHOP

1	<p>Organizing Committee, "BOĞAZIÇI-METU(ODTÜ)-OSTIMTECH Feza Gürsey Commemoration Day," OSTIMTech, Ankara, July 2025.</p> <ul style="list-style-type: none"> • Web: https://www.ostimteknik.edu.tr/en/event/bogazici-metu-ostimtech-feza-gurse-y-commemoration-day-09-july-2025-6491/register • The following leading scientists gave talks: <ul style="list-style-type: none"> ➤ Itzhak Bars (University of Southern California, Los Angeles, USA) ➤ Tekin Dereli (Koç University, Istanbul, Turkey) ➤ Anupam Mazumdar (University of Groningen, Netherlands) ➤ Naim Göksel Karaçaylı (Ohio State University, OH, USA) ➤ Heeseung Zoe (Izmir Institute of Technology, Turkey) ➤ Murat Yülek (Rector of OSTIMTech, Ankara, Turkey) ➤ İskender ÖKSÜZ (Kapadokya University, Turkey)
2	<p>Organizing Committee, "The 2nd Physics Days Meeting", Eastern Mediterranean University, N. Cyprus, March 21-22, 2019.</p> <ul style="list-style-type: none"> • Web: https://physicsdays.emu.edu.tr/en
3	<p>Organizing Committee, "BOĞAZIÇI-METU(ODTÜ)-UTAA Monthly Joint Seminar Series", (Online), 2021-22.</p> <ul style="list-style-type: none"> • Web: https://sites.google.com/view/boun-metu-utaajointseminerseri/home • The following leading scientists gave online talks: <ul style="list-style-type: none"> ➤ Daniel GRUMILLER (Vienna University of Technology, Wien, Austria) ➤ Mithat UNSAL (North Carolina State University, NC, USA) ➤ Umut GURSOY (Utrecht University, Netherlands) ➤ Anupam MAZUMDAR (University of Groningen, Netherlands)

CONFERENCE PRESENTATIONS

1	S. Dengiz , "Weyl's gauge gravity", The 1st Gülbahçe School and Workshop for Theoretical Physics , <u>Izmir Institute of Technology</u> , Izmir, February 20-22, 2025. (Invited Speaker)
2	S. Dengiz , "Strategy Workshop to Determine Turkey's Road Map for the Future Years on CERN, High Energy Physics and Accelerator Technologies," Turkish Nuclear Energy Agency , Ankara, Turkey, October 23, 2023. (Invited Scientist)
3	M. Aras Rafighi, Samet Emre Bilim, and S. Dengiz , "GG25 Gray Cast Iron; Carbide Insert; Surface roughness; Force; Power", 4th International Conference on Recent Advances in Mechanical Engineering Research and Development , Springer, <u>Materials Today: Proceedings</u> , MATPR-D-23-04466R1. (2023).
4	S. Dengiz , "Weyl-gauged Topologically Massive Gravity", 16th Workshop on Dualities and Integrable Systems , Mimar Sinan Fine Arts University, Istanbul, Turkey, April 21-23, 2018.
5	S. Dengiz , "Weyl-gauging of Higher Derivative Theories and Spontaneous Symmetry Breaking", The National Workshop: High Energy Physics Days , <u>Middle East Technical University</u> , Ankara, Turkey, February 12-14, 2015.
6	S. Dengiz , "Higgs-type mechanism for graviton", 11th Workshop on Quantization, Dualities and Integrable Systems , <u>Pamukkale University</u> , Denizli, Turkey, April 21-23, 2012
7	S. Dengiz , "Higgs Mechanism for New Massive Gravity and Weyl-invariant Extensions of Higher Derivative Theories", The National Workshop: High Energy Physics Days , <u>Ankara University</u> , Ankara, Turkey, December 27-30, 2011.
8	S. Dengiz , "Higgs Mechanism for Weyl-gauged Higher Curvature Gravity Theories", The International Workshop on Recent Advances in Quantum Field and String Theories , <u>Free University</u> , Tbilisi, September 26-30, 2011, Georgia

SEMINARS INVITED

1	S. Dengiz , "Towards A Complete Quantum Gravity", Izmir Institute of Technology, Physics Dept. , (Online), Izmir, Turkey, December 22, 2020.
2	S. Dengiz , "The Edge of Universe: Black Holes", Baskent University , Faculty of Engineering, Ankara, Turkey, April 26, 2019.
3	S. Dengiz , "Theory of Everything", Middle East Technical University , Department of Chemistry (Dengiz Research Group), Ankara, Turkey, January 02, 2019.
4	S. Dengiz , "Theory of Everything", UTAA IEEE and AESS Student Communities , Ankara, Turkey, December 20, 2018.
5	S. Dengiz , "Weyl-gauged Higher Curvature Gravity Theories and the Spontaneous Generation of Masses of Particles," Mimar Sinan Fine Arts University , Physics Department, Istanbul, Turkey, December 29, 2016.

ORGANIZED SEMINARS

1	Speaker: Dr. Soner Albayrak (YALE) , "Light-cone Limit Analysis of Four Fermion Point Functions," Mechanical Engineering and Astronautical Engineering Joint Applied Science Seminars, Ankara, UTAA, May 29, 2018. (Host: S. Dengiz)
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2	Speaker: Prof. Altug Özpıneci (METU) , “Accelerators: Their Industry Applications and Particle Physics,” Mechanical Engineering and Astronautical Engineering Joint Applied Science Seminars, Ankara, UTAA, May 09, 2018. (Host: S. Dengiz)
3	Speaker: Prof. Sıtkı Çağdaş Inam (Başkent University) , “X-ray Astronomy and NASA’s Mission,” Mechanical Engineering and Astronautical Engineering Joint Applied Science Seminars, Ankara, UTAA, April 25, 2018. (Host: S. Dengiz)
4	Speaker: Bilge Tuncel (METU) , “Thermal Modeling of PV Module Temperature and Yield and Its Verification,” Mechanical Engineering and Astronautical Engineering Joint Applied Science Seminars, Ankara, UTAA, April 18, 2018. (Host: S. Dengiz)
5	Speaker: Prof. Bülent G. Akinoğlu (METU) , “Toward Renewable Energy: Do Water, Wind and Sun on Earth Have Enough Potential to Supply Future Energy Demand?” Mechanical Engineering and Astronautical Engineering Joint Applied Science Seminars, Ankara, UTAA, April 11, 2018. (Host: S. Dengiz)

ATTENDED CONFERENCES AND LECTURES

1	“The International Workshop on Flat Holography,” The Simons Center for Geometry and Physics, Stony Brook University , New York, April 4-8, 2016, USA.
2	“The Morris Loeb Lectures in Physics: Black Holes, Gravity and Quantum System”, Harvard University , Cambridge, March 21-25, 2016, USA. (Lecturer: Juan MALDACENA)
3	“The Spring 2016 Course: The Infrared Structure of Gravity and Gauge Theory,” Harvard University , Cambridge, Spring, 2016, USA. (Lecturer: Andrew STROMINGER)
4	Several Talks on High Energy Physics, MIT- Massachusetts Institute of Technology , Center for Theoretical Physics/Laboratory for Nuclear Science, Cambridge, 2015-2016, USA. (Including those by C. Vafa, A. Strominger, I. Stewart, D. Grumiller)
5	“13th Workshop on Quantization, Dualities and Integrable Systems,” Koc University , Istanbul, Turkey, April 19-20, 2014.
6	“The International Conference on Strings, Branes and Supergravity,” Koc University , Istanbul, Turkey, August 1-5, 2011.
7	“9th Workshop on Quantization, Dualities and Integrable Systems,” Yeditepe University , Istanbul, Turkey, April 23-25, 2010.

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	157
H-index (ISI Web of Science):	7

COURSES GIVEN

1	Electromagnetic Theory I (B.S.)
2	Advanced Engineering Electromagnetics (M.S., Ph.D.)
3	Signals and Systems (B.S.)

4	Antennas and Electromagnetic Wave Propagation (B.S.)
5	Electronic Circuits (B.S.)
6	Advanced Engineering Mathematics (M.S., Ph.D.)
7	Machine Theory (B.S.)
8	Mechanical Vibrations (B.S.)
9	Introduction to Quantum Physics (B.S.)
10	Material Science (B.S.)
11	Introduction to Plasma Physics and Engineering (B.S.)
12	Dynamics (B.S.)
13	Statics (B.S.)

THESES SUPERVISED

1	Samet Emre Bilim , "Investigation Of Machinability Of Gg25 Grey Cast Iron", 2023, (YÖK TEZ NO: 833458). Supervisor: Assoc. Prof. Dr. Suat Dengiz (Co-supervisor: Assoc. Prof. Dr. M. Aras Raphi, Başkent, University)
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