Prof. Dr. Ali ÖVGÜN

Theoretical Physicist | Eastern Mediterranean University

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Google Scholar | *Web of Science* | *INSPIRE* | *arXiv* | *Scopus* | *ResearchGate*

Contact and Research Profile

Mailing Address	AS246, Department of Physics, Eastern Mediterranean University, A. Einstein Street, 99628 Gazimagusa, TRNC via Mersin 10, Türkiye
Research Areas	Theoretical physics, quantum gravity, black holes, wormholes, gravitational lensing, black hole shadows, Hawking radiation, quasinormal modes, cosmology, inflation, dark matter, dark energy, compact stars, and quantum optics in curved spacetime.

Professor of Physics with research centered on quantum gravity, black hole physics, cosmology and quantum phenomena in curved spacetime.

Academic Appointments and Research Visits

Professor of Physics **June 2026-Now**

Eastern Mediterranean University

Associate Professor **August 2020-June 2026**

Eastern Mediterranean University

Assistant Professor **Sept.2018-July 2020**

Eastern Mediterranean University, Gazimagusa, TÜRKİYE

Postdoctoral Fellow **2017-2020**

Instituto de Física, Pontificia Universidad Católica de Valparaíso (PUCV), CHILE

Research visitor **July/August 2022**

Prof. Durmus A. Demir, Sabanci University, Istanbul, TÜRKİYE.

Prospects in Theoretical Physics 2018: From Qubits to Spacetime (PITP 2018) **July 2018**

Institute for Advanced Study, 1 Einstein Drive, Princeton, USA.

Research visitor **April/May 2018**

Prof. Leonard Susskind, Stanford Institute for Theoretical Physics, Stanford University, Stanford, California 94305, USA.

Research visitor **April 2018**

Prof. Douglas Singleton, Physics Department, California State University, Fresno, CA 93740, USA.

Research visitor **Jan/Feb 2018**

Prof. Robert B. Mann, Department of Physics and Astronomy, University of Waterloo, Waterloo, Ontario, N2L 3G1, CANADA

Research visitor **Jan/Feb 2018**

Perimeter Institute for Theoretical Physics, Waterloo, Ontario, N2L 2Y5, CANADA

Research visitor **Oct/2017**

Theoretical Physics -The European Organization for Nuclear Research-CERN Theory Division, Geneva, SWITZERLAND

Research Assistant in Physics **09/2011-07/2016**

Eastern Mediterranean University, Full-time,

working alongside teachers to support learning activities, acting as a specialist assistant for particular subjects and leading classes under the direction of the teacher

Education

BSc. Physics (English) **09/2006-07/2010**

Izmir Institute of Technology, TÜRKİYE

CGPA: 3.28/4.00 With honors degree and graduated from undergrad as the 2nd. best student. Thesis title: Time in Quantum Tunneling.
Supervisor: Prof. Dr. Durmus A. Demir

NExT Ph.D. Astroparticle Physics (as a Visiting Scholar) **09/2010-06/2011**

University of Southampton, UNITED KINGDOM

I took QFT, QFT2, Cosmology and GR courses.

MSc. Physics **09/2011-02/2013**

Eastern Mediterranean University,

CGPA:3.43/4.00, Thesis title: Dark Matter Modification of f(R) or Wimps Miracle
Supervisor: Prof. Dr. Mustafa Halilsoy

Ph.D. Physics **02/2013- 06/2016**

Eastern Mediterranean University,

CGPA:3.71/4.00 Thesis title: Studies on Thin-shells and Thin-shell Wormholes
Supervisor: Prof. Dr. Mustafa Halilsoy

High School **09/1999-07/2005**

19 Mayis Turk Maarif Koleji, Girne,

CGPA: 8.6/10 Majored in Science and Mathematics, with high honors

Skills

Languages	Turkish (mother tongue)
	English (fluent) (YÖKDİL Exam: 92.50/100)
	Spanish (beginner)
	Russian (beginner)
	Italian (beginner)
Software	Maple, LaTeX, Python, Linux, Fortran, Mathematica, Xvs, Rnpletal, EDCRGTC, Ricci, GRTensor, Cadabra, Maxima, xAct.

International Projects

CONICYT FONDECYT Postdoctorado Grant No. 3170035- CHILE **2017-2020**

Information Extraction From Black Holes And Wormholes By Their Quasinormal-Modes, Greybodies And Hawking Radiations,
***Sponsoring researcher and institution**: Prof. Dr. Joel Saavedra*
Pontificia Universidad Catolica De Valparaiso, Chile.
***Budget:** 120,000 $.*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2019-2023**

CA18108- Quantum gravity phenomenology in the multi-messenger approach (QG-MM),
***Working Group Membership**: WG 1 Theoretical frameworks for gravity effects below the Planck energy, WG 2 Phenomenology of quantum gravity, WG 6 Gravitational waves.*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2022-2026**

CA21136 - Addressing observational tensions in cosmology with systematics and fundamental physics (CosmoVerse),
***Working Group Membership**: WG 3 Fundamental Physics.*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2022-2026**

CA21106 - COSMIC WISPers in the Dark Universe: Theory, astrophysics and experiments (CosmicWISPers),
***Working Group Membership**: WG 2 WISPs Dark Matter and Cosmology, WG 3 WISPs in Astrophysics.*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2023-2027**

CA22113 - Fundamental challenges in theoretical physics (THEORY-CHALLENGES),
***Working Group Membership**: WG 2 Gravity and Holography, WG 3 Low-dimensional systems.*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2024-2028**

CA23130 - Bridging high and low energies in search of quantum gravity (BridgeQG),
***Working Group Membership**: WG 1 High-energy quantum gravity theory, WG 2 High-energy quantum gravity experiment, WG 5 Connection between low-energy and high-energy quantum gravity*

EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY **2024-2028**

CA23115 - Relativistic Quantum Information (RQI) ,
***Working Group Membership**: WG 2 Gravitational quantum physics and metrology*

TUBİTAK 2515 (The Scientific and Technological Research Council of Turkiye) **2026-2029**

Symmergent Kütleçekimi Çerçevesinde Manyetik Yüklü Kara Deliklerin Geometrik Ve Termodinamik Analizi
***Research Leader**: Dr. Beyhan Pulice, Sabanci University, Turkiye, **Overseas researcher:** Prof. Dr. Ali Övgün. **Budget:** 1,296,000 TL.*

Memberships

1. Turkish Astronomical Society (TAD)
2. European Astronomical Society (EAS)
3. International Society for Quantum Gravity (ISQG)
4. Institute of Physics (IOP) UK
5. American Physical Society (APS)
6. The European Physical Society (EPS)

7. Canadian Association of Physicists (CAP)
8. The Cyprus Physicists Society
9. Southeastern European Network in Mathematical and Theoretical Physics (SEENET-MTP)
10. American Mathematical Society (AMS)

Honors, Awards and Grants

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1. 2005-2010 Scholarship from TRNC Ministry of National Education.
2. 2010 Scholarship for MSc EuroMasters in Physics from University of Southampton, UK.
3. 2010 Scholarship from AtoSim Erasmus Mundus Master of Science, EU.
4. 2010-2011 Scholarship from NExT PhD school, University of Southampton, UK.
5. 2011-2016 Research Assistantships, Eastern Mediterranean University.
6. 2014-2016 EMU IGSR Publication Awards.
7. 2017-2020 Postdoctoral Fellowship, CONICYT-Chile through FONDECYT postdoctorado No. 3170035, Pontificia Universidad Catolica de Valparaiso, CHILE.
8. WEBOFSCIENCE PUBLONS 2018 Peer Review Awards, USA.
9. EMU 2018 Outstanding Publication Awards
10. EMU 2018 Citation Awards
11. WEBOFSCIENCE PUBLONS 2019 Top Peer Reviewer in Physics Awards, USA.
12. IOP 2019 Outstanding Reviewer for Classical and Quantum Gravity
13. EMU 2019-2024 Citation Awards
14. EMU 2019 Outstanding Publication Awards
15. Among World's Top 2% Scientists – Stanford University 2019 Releases List
16. Ranking of first 6000 academicians along with their major and scientific area of interests in TÜRKİYE based on H-index and citations, 2021 Scientists – Prof. Murat Alper
17. Among World's Top 2% Scientists – Stanford University 2020 Releases List
18. Among World's Top 2% Scientists – Stanford University 2021 Releases List
19. Among World's Top 2% Scientists – Stanford University 2022 Releases List
20. Among World's Top 2% Scientists – Stanford University 2023 Releases List
21. Highly Ranked Scholar 0.05% Scientists – ScholarGPS 2023 Releases List
22. Highly Ranked Scholar 0.05% Scientists – ScholarGPS 2024 Releases List
23. 2026 The Republic of Turkey's Ministry of Culture and Tourism, Presidency for Turks Abroad and Related Communities (YTB) TURKIYE ALUMNI SCIENTIFIC AND ACADEMIC ACHIEVEMENTS AWARD
24. 2026 Prof. Dr. Engin Arık Scientist Award by the Turkish Physical Society in recognition of his scientific and academic research, original contributions to physical science, and international scientific collaborations.

Supervisorships

- PhD Supervisor: YASHMITHA KUMARAN (Present Postdoc at UNAM, Mexico)
  Weak Deflection Angle via Gauss-Bonnet Theorem, 2018-2023.
- MSc Supervisor: FLORA BABAYEVA (Present Teacher at Azerbaijan British College)
  Shadow Cast of The Schwarzschild-like Black Holes, 2020-2022.
- MSc Supervisor: HAMZA SABER ZEBARI (Present Teacher at Iraq)
  Newtonian Cosmology, 2018-2020.
- MSc Supervisor: GABRIEL WIRDZELII JOSEPH (Present Instructor at Taraba State University, Nigeria)
  Cosmology with Varying Physical Constants, 2018-2020.
- MSc Supervisor: HUSEYIN KARYAL (PhD Student at EMU)
  Geodesics of Black Holes in Bumblebee Gravity Theory, 2018-2020.
- Msc Project: ILIM IRFAN CIMDIKER (SABANCI UNIVERSITY-TÜRKİYE) (Present Phd Student at University of Szczecin, Poland)
  Black Hole Shadow in Symmergent Gravity, PHYSICS OF DARK UNIVERSE 2021. (Supervisor: Prof.Dr.Durmus Ali Demir)
- BSc Project: CEREN H. BAYRAKTAR (IYTE-TÜRKİYE) (Present Msc Student at University of Göttingen))
  Thermodynamics of regular black holes with cosmic strings, European Physical Journal - Plus 2018. (Supervisor: Prof.Dr.Durmus Ali Demir)
- BSc Project: MERT OKYAY (MIAMI UNI.-USA) (Present Phd Student at University of Colorado Boulder)
  Nonlinear electrodynamics effects on the black hole shadow, deflection angle, quasinormal modes and greybody factors, Journal of Cosmology and Astroparticle Physics 2022.
- BSc Project: CEM KALKANLI (İTÜ-TÜRKİYE)
  Black Hole Physics.

Editorial Roles

1. Guest Editor: Turkish Journal of Physics
2. Associate Editor, High-Energy and Astroparticle Physics Frontiers in Physics & Frontiers in Astronomy and Space Sciences
3. Review Editor: Frontiers in Physics: Special Issue on Quasinormal Modes in Relativistic Stars and Black Holes
4. Review Editor: Frontiers in Physics: High-Energy and Astroparticle Physics
5. Guest Associate Editor: Frontiers in Physics: in Stellar and Solar Physics
6. Guest Editor: UNIVERSE: Special Issue "Recent Progress of Black Holes Physics"
7. Guest Editor: SYMMETRY: Special Issue "Recent Progress of Black Holes Physics"
8. Review Editor: Trends in Theoretical Physics Journal (TTP)
9. Review Editor: Optimum Science Journal

Selected Journals Refereed

My Web of Science Profile for complete list

1. Physical Review D
2. Classical and Quantum Gravity
3. Physics Letters B
4. The European Physical Journal C
5. Nuclear Physics B
6. Journal of Cosmology and Astroparticle Physics
7. Fortschritte der Physik- Progress of Physics
8. Annals of physics
9. Annalen der Physik
10. The European Physical Journal Plus
11. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences
12. EPL (Europhysics Letters)
13. Physics of the Dark Universe
14. General Relativity and Gravitation
15. International Journal of Geometric Methods in Modern Physics
16. Canadian Journal of Physics

Grant and Project Reviewing

- European Research Executive Agency, HORIZON Marie Skłodowska-Curie Postdoctoral Fellowships (HORIZON MSCA-PF)
- TUBITAK UPAG - Uluslararasi Isbirligi Projeleri Arastirma Destek Grubu Projeleri
- TUBITAK 1001 - Bilimsel ve Teknolojik Araştırma Projelerini
- TUBITAK 2515 - COST Aksiyon Üyeleri Ar-Ge Destek Program
- TUBITAK 1002 - Hızlı Destek Programı
- TUBITAK BIDEB 2021 Bilim Insani Destekleme Programlari Doktora Sonrasi Arastirmaci Projeleri
- TUBITAK 2218- Yurt Ici Doktora Sonrası Arastirma Burs Programi
- Swiss National Science Foundation (SNSF) Projects
- CHILE CONICYT FONDECYT (Fondo Nacional de Desarrollo Científico y Tecnológico)

Administrative Service

- Member of Faculty Board: October 2023-December 2026
- Chair of the Social Media Committee of the Physics and Chemistry Departments: October 2018-Present
- Chair of the Graduation Committee of the Physics and Chemistry Departments: October 2018-Present

- Member of the Faculty BAP-C Committee of EMU: October 2018-Present
- TÜBİTAK Panelist & Advisor: 2018-Present

Volunteer and Outreach Activities

- Head of IYTE Physics Society, (2007-2010).
- Giving a talk about Black holes at High School Students, Erenköy Lisesi (29 April 2019)
- Giving a talk about black holes to students from Turkey at "Biricik Bilim Fizik ve Matematik Haftası", (15-16 May 2021)
- Giving lecture at 2nd Astronomy Summer Workshop for High School Students, Famagusta EMU(3-4 August 2023)
- Being a guest on the TV Program titled "Yaşama Sanatı" on BRT (state television of the Turkish Republic of Northern Cyprus) to discuss the topic "Astrophysics and Our Universe" (07/09/2023)

Conferences and Summer Schools

- 2007-May, Eskisehir/TÜRKİYE, UFOK-III (3rd National Student Conference of Turkish Physical Society).
- 2007-July, Karlsruhe/Germany, Conference & Summer School- SUSY07.
- 2007-August, Bodrum/TÜRKİYE, ISCBPU-V (5th International Student Conference of Balkan Physical Union.
- 2008-July, ICTP - The Abdus Salam International Centre for Theoretical Physics, Trieste/Italy, Summer School-COSMOLOGY 08.
- 2008-September, Akyaka-Mugla/TÜRKİYE, ISSCSMB08 International Summer School and Conference on Standard Model and Beyond (organized by METU, TUBITAK and ICTP).
- 2009-June, METU Ankara/TÜRKİYE, UFOK-5 (5th National Student Conference of Turkish Physical Society).
- 2009-July, TUBITAK Feza Gursey Theoretical Physics Institute Istanbul/TÜRKİYE, IARS II. National Summer Student School on High Energy Physics (YEF09).
- 2009-July, TUBITAK Feza Gursey Theoretical Physics Institute Istanbul/TÜRKİYE, Lectures on Neutrino Mass and Grand Unified Theories by Goran Senjanovic (ICTP).
- 2009-August, Ambleside- Lancaster/UK, Linear Collider Physics School 2009.
- 2009-August, Akyaka-Mugla/TÜRKİYE, ISSCSMB09 International Summer School and Conference on Standard Model and Beyond(organized by METU, TUBITAK and ICTP).
- 2012-April, METU NCC, Workshop on Recent Developments in High Energy Physics.
- 2013-April, Koc University, Istanbul/TÜRKİYE, 12th Quantization, Dualities and Integrable Systems.
- 2013-May, METU NCC, Workshop on Recent Developments in High Energy Physics.
- 2014-April, Koc University, Istanbul/TÜRKİYE, 13th Quantization, Dualities and Integrable Systems.
- 2015-May, EMU Famagusta, 14th Quantization, Dualities and Integrable Systems.
- 2015-July, FIAS Frankfurt/Germany, 2nd Karl Schwarzschild Meeting on Gravitational Physics.
- 2017-November, Mini-courses on Black hole Chemistry, Prof. Robert Mann, PUCV, CHILE.
- 2017-November, Gravity at UCEN 2017: Black holes and Cosmology. Universidad Central de Chile,

Santiago.

- 2017-November, SCHOOL ON NUMERICAL METHODS IN GRAVITY AND HOLOGRAPHY by L.Lehrer, T.Andrade and S.Green. Universidad de Concepcion, Chile.
- 2017-November/December, Sixth Meeting of CosmoConce 2017, Universidad del Bio-Bio, campus Concepcion, Chile.
- From Qubits to Spacetime, Prospects in Theoretical Physics 2018, July 2018, Institute for Advanced Study, Princeton, USA.
- 2019-January, 2. Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2019 (YEFAK2019), Istanbul University, TÜRKİYE.
- 2019-March, The 2nd Physics Days 2019, EMU Famagusta.
- 2021 February, 4. Yüksek Enerji Fiziği, Astrofizik ve Kozmoloji Çalıştayı 2021 (YEFAK2021), Istanbul University, TÜRKİYE.
- 2021 March, Chairing of the session at International Webinar on Recent Developments in Cosmology and Modified Gravity (RDCM-2021), BITS-Pilani, INDIA.
- 2021 March, Invited speaker at IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA.
- 2021 March, Speaker at Beyond Standard Model: From Theory to Experiment (BSM-2021), The Center for Fundamental Physics (CFP) at Zewail City of Science and Technology and Faculty of Engineering and Natural Sciences at Sabancı University.
- 2021 May, Chairing of the session at Fourth Summer School and Workshop on the Lorentz- and CPT-violating Standard-Model Extension, Indiana University, Bloomington USA.
- 2021 August, Chairing of the session at GRAVITEX 2021 Durban, KwaZulu-Natal, South Africa.
- 2021 October, Chairing of the session at 27th International Conference of International Academy Physical Sciences on Advances in Relativity and Cosmology (PARC-2021).
- 2022 May, Chairing of the session at Frontiers of Fundamental Physics FFP16 International Symposium.
- 2022 May, Invited Career Day Speaker, Girne 19 Mayıs TMK, Cyprus.
- 2022 July, Invited talk in the International Conference on Mathematical Sciences and its Applications (ICMSA-2022), India.
- 2023 March, Chairing of the session at the Second IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA.
- 2023 March, Invited talk at the Second IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA.
- 2023 March, Invited talk at the Bilkent University, Applied Mathematics Department, TÜRKİYE.
- 2023 October, ICTP Workshop on String Theory, Holography, and Black Holes , ICTP - The Abdus Salam International Centre for Theoretical Physics, Trieste, ITALY.
- 2023 December, Invited speaker, 7 th UMT INTERNATIONAL CONFERENCE ON Pure and Applied Mathematics (7th UICPAM-2023), University of Management and Technology Department of Mathematics, PAKISTAN.
- Invited Plenary talk at International Conference on Gravitation and Cosmology (ICGC24) 29-31 January 2024, Department of Mathematics and Statistics, The University of Lahore, PAKISTAN.
- Chairing of the session at the Fifth IUCSS Summer School and Workshop on the Lorentz- and CPT-violating Standard-Model Extension, Indiana University, Bloomington USA, May 2024.
- Invited Plenary Talk, CSG-2024 Conference "COMPUTER SCIENCE AND GRAVITATION – 2024" Baku, Azerbaijan, 19-23 August 2024.

- Invited Plenary Talk, , Hradec Králové International Physics Days 2024, 13 — 14 December 2024, Česká republika.
- Chairing of the session at the Third IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA, 13-14 March 2025.
- Invited Talk, PPGF / UAF - II Workshop: Buracos Negros e Análogos Gravitacionais 2025, 12-14 August, UFCG, Campina Grande, Brazil.
- Invited Talk, Probing the Baryonic–to–Quark Matter Transition with Regular Black Hole Models. Invited Talk, the 41st International Physics Congress of the Turkish Physical Society, Bodrum, Türkiye, 1-5 Eylül 2025.

Invited Talks and Seminars

- Testing Modified Gravity through Black Hole Shadows and Deflection of Light. Invited Talk, Cosmo@BPHC Seminar Series, India, 7 April 2026.
- Probing the Baryonic–to–Quark Matter Transition with Regular Black Hole Models. Invited Talk, the 41st International Physics Congress of the Turkish Physical Society, Bodrum, Türkiye, 1-5 Eylül 2025.
- Probing Black Holes: Shadow Imaging and Weak Deflection Angles, Invited Talk, PPGF / UAF - II Workshop: Buracos Negros e Análogos Gravitacionais 2025, 12-14 August, UFCG, Campina Grande, Brazil.
- Lorentz-Violation Effects on Bumblebee Black-Hole Shadows: Insights From EHT Data and Deflection Angles, Invited Talk, The Third IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA, 13 March 2025.
- Shadow of the Regular Black Holes, Invited Talk, A Life Dedicated to Theoretical Physics: In Memory of Durmuş Ali Demir | 24 Feb 2025, Sabanci University, Istanbul, Turkiye.
- Exact regular black hole solutions with de sitter core and its shadow, Invited Plenary Talk, Hradec Králové International Physics Days 2024, 13 — 14 December 2024, Česká republika.
- Influence Of Geometrical Deformation And Dark Matter Medium On Photon Sphere And Shadow Radius Of Black Holes, Invited Plenary Talk, CSG-2024 Conference "COMPUTER SCIENCE AND GRAVITATION – 2024" Baku, Azerbaijan, 19-23 August 2024.
- Probing Schwarzschild-like Black Holes in Metric-Affine Bumblebee Gravity with Accretion Disk, Deflection Angle, Greybody Bounds, and Neutrino Propagation, Fifth IUCSS Summer School and Workshop on the Lorentz- and CPT-violating Standard-Model Extension Indiana University, Bloomington USA, May 2024.
- Unvelling the Impact of Fuzzy Dark Matter on Supermassive Black Holes: Probing the Quantum Realm. Invited Plenary talk at International Conference on Gravitation and Cosmology (ICGC24) 29-31 January 2024, Department of Mathematics and Statistics, The University of Lahore, PAKISTAN 2024 January.
- Black hole in quantum wave dark matter. Invited speaker at 7th UMT INTERNATIONAL CONFERENCE ON Pure and Applied Mathematics (7 th UICPAM-2023), University of Management and Technology Department of Mathematics, PAKISTAN 2023 December.
- Can we spot modified gravity black holes? Invited talk in the Bilkent University, Applied Mathematics Department, TÜRKİYE 2023 March.
- Can We Spot The Black Holes in Lorentz-Symmetry-Breaking Theories? Invited talk in the Second IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA, March 2023.
- Invited talk in the Sabanci University, Istanbul, TÜRKİYE 2022 July.

- Can We Spot The Black Holes in Modified Gravity Theories? Invited talk in the International Conference on Mathematical Sciences and its Applications (ICMSA-2022), India, 2022 July.
- Ağacın Gölgesinden, Karadeliğin Gölgesine, Ankara Üniversitesi Fizik Bölümü Pop Fizik Seminerleri May 26th, 15:30
- Testing Modified Gravity Theories Using Weak Deflection Angle and Black Hole Shadow,Virtual Friday Cosmology Seminar @ Szczecin Cosmology Group - May 20th, 13:30
- Weak field deflection angle by regular black holes with cosmic strings, Beyond Standard Model: From Theory to Experiment (BSM-2021), The Center for Fundamental Physics (CFP) at Zewail City of Science and Technology and Faculty of Engineering and Natural Sciences at Sabancı University, March 2021.
- Black Hole with Global Monopole and Wormhole Solutions in Bumblebee Gravity, IUCSS Workshop on Gravitational Aspects of Lorentz Violation, Indiana University, Bloomington USA, March 2021.
- Testing Modified Gravity Theories Using Weak Deflection Angle and Black Hole Shadow, RDCM-2021, BITS-Pilani, India, March 2021.
- Weak Deflection angle of Extended Uncertainty Principle Black holes, with my PhD Student Yashmitha Kumaran RDCM-2021, BITS-Pilani, India, March 2021.
- Zayıf Sapma Açısı ve Kara Delik Gölgesini Kullanarak Modifiye Yerçekim Teorilerini Test Etmek, YEFAK2021, Istanbul University, TÜRKİYE, February 2021.
- Light Deflection by Blackholes/Wormholes Using Gauss-Bonnet Theorem, The 2nd Physics Days 2019, EMU, Famagusta, March 2019.
- Weak gravitational lensing and Gibbons-Werner method, YEFAK2019, Istanbul University, TÜRKİYE, January 2019.
- Light Detection by Wormholes and Gibbons-Werner method, Department of Physics and Astronomy, University of Waterloo, Canada, 15 January 2018.
- Thin-shell Wormholes/Gravastars. Universidad del Bio-Bio, campus Concepcion, Chile. 2017-November/December. Sixth Meeting of CosmoConce 2017.
- Hidden gates in universe: Wormholes. Universidad Central de Chile, Santiago. November 2017, Gravity at UCEN 2017: Black holes and Cosmology,
- Thin-shell Wormholes and Gravastars, Universidad de Valparaiso (UV), Chile, November 2017, Seminarios Astrofisicos.
- Thin-shell Wormholes and Gravastars, Pontificia Universidad Catolica de Valparaiso (PUCV), Chile, September 2017, Seminario del grupo de Gravitacion, Cosmologia y Astrofisica.
- Particle Collision near 1+1 Dimensional Horava-Lifshitz Black Holes, FIAS Frankfurt, Germany July 2015, Workshop KSM2015.
- Particle Collision near 1+1 Dimensional Horava-Lifshitz Black Holes, EMU, May 2015, Workshop QDIS14.
- Thin-shell wormholes from the regular Hayward black hole, Koc University Istanbul/TÜRKİYE, April 2014, Workshop QDIS13.
- Thin-shell wormholes from the regular Hayward black hole, IYTE Izmir/TÜRKİYE, Jan 2014, Seminar.
- Thin-shell wormholes from the regular Hayward black hole, EMU, Dec 2013, Seminar.
- Dark Matter Modification of f(R) or Wimps Miracle, EMU, Jan 2013, Master Thesis Defense.
- The Mystery of Mass, Eskisehir/TÜRKİYE, May 2007, 3rd National Conference of Physics Students (UFOK-3).
- The Dark Side of the Cosmos, Izmir/TÜRKİYE, December 2008, IYTE Physics Society.
- String Theory, METU Ankara/TÜRKİYE, June 2009 , 5th National Conference of Physics Students

(UFOK-5).

Single-Author Papers

1. **Weak gravitational lensing of regular black holes with cosmic strings using the Gauss-Bonnet theorem**,
Physical Review D 99, 104075 (2019),
arXiv:1902.04411.
2. **Light deflection by Damour-Solodukhin wormholes and Gauss-Bonnet theorem**,
Physical Review D 98, 044033 (2018),
arXiv: 1805.06296.
3. **Black hole with confining electric potential in scalar-tensor description of regularized 4-dimensional Einstein-Gauss-Bonnet gravity**,
Physics Letters B 820, 136517 (2021),
arXiv:2105.05035.
4. **Weak Gravitational Lensing in Ricci-Coupled Kalb–Ramond Bumblebee Gravity: Global Monopole and Axion-Plasmon Medium Effects**,
Physics of the Dark Universe 48, 101905 (2025),
arXiv:2504.07130.
5. **Probing Weak-Force Corrections to Black Hole Geometry via Long Range Potentials: Feinberg-Sucher and Ferrer-Presentakowski Potentials**,
Physics of the Dark Universe 101941 (2025),
arXiv:2505.06382.
6. **Quasinormal Mode Spectroscopy via Horizon-Brightened Quantum Optics**,
The European Physical Journal C 86, 293 (2026),
arXiv:2511.07488.
7. **Inflation and Acceleration of the Universe by Nonlinear Magnetic Monopole Fields**,
The European Physical Journal C 77:105 (2017),
arXiv:1604.01837.
8. **Horizon brightened acceleration radiation near de Sitter horizons via minimal and derivative coupled detectors**,
International Journal of Geometric Methods in Modern Physics (2026),
10.1142/S0219887826501975.
9. **Evolving topologically deformed wormholes supported in the dark matter halo,**
The European Physical Journal Plus 136: 987 (2021),
arXiv:1803.04256.
10. **Rotating Thin-Shell Wormhole**,
The European Physical Journal Plus 131: 389 (2016),
arXiv:1604.08477.
11. **Entangled Particles Tunneling From a Schwarzchild Black Hole immersed in an Electromagnetic Universe with GUP**,
International Journal of Theoretical Physics 55: 2919-2927 (2016),
arXiv:1508.04100.
12. **P-V criticality of a specific black hole in f(R) gravity coupled with Yang-Mills field**,
Advances in High Energy Phsics 2018, 8153721, (2018),
arXiv:1710.06795.
13. **The Bekenstein-Hawking Corpuscular Cascading from the Backreacted Black Hole**,
Advances in High Energy Physics 2017, 1573904, (2017),

arXiv:1609.07804.

14. **Deflection angle of photon through dark matter by black holes and wormholes using the Gauss-Bonnet theorem**,
Universe 5(5), 115 (2019) (invited): Special Issue "Gravitational Lensing and Optical Geometry: A Centennial Perspective"
arXiv:1806.05549.

15. **Weak Deflection Angle of Black-bounce Traversable Wormholes Using Gauss-Bonnet Theorem in the Dark Matter Medium**,
Turkish Journal of Physics 44, 465-471 (2020) (invited),
arXiv:2011.04423.

Publications

Total publications listed in this CV: 242

PHYSICAL REVIEW D

1. **Ringdown of a black hole sourced by a Burkert-density effective anisotropic source**,
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Jointly with Yashmitha Kumaran.

THESIS

1. Ph.D Thesis Studies on Thin-shells and Thin-shell Wormholes. arXiv:1610.08118.
2. M.Sc Thesis Dark Matter: Modification of f(R) or Wimps Miracle. arXiv:1301.5371.

PRESS/ MEDIA

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1. **EMU NEWS**: Prof. Dr. Ali Övgün Receives the TFD 2026 Prof. Dr. Engin Arık Scientist Award
2. **EMU NEWS**: EMU Department of Physics Academic Prof. Dr. Ali Övgün Presented with "Scientific and Academic Studies" Award by YTB
3. **EMU NEWS**: Prof. Dr. Ali Övgün Receives the 2026 YTB Turkey Alumni Scientific and Academic Achievements Award
4. **EMU NEWS**: Ali Övgün Accepted as a Member of the European Astronomical Society (EAS)
5. **EMU NEWS**: Ali Övgün Ranks in the Top 0.05% Worldwide in ScholarGPS 2025: Ranked 2 in Black Hole Research!
6. **EMU NEWS**: EMU Researcher Övgün Contributes to Major International White Paper on the Dark Universe
7. **EMU NEWS**: Most Succesfull Academics of 2024 Awarded at EMU with the Participation of TRNC Minister of National Education Nazım Çavuşoğlu
8. **EMU NEWS**: Innovative Black Hole Project Designed in Collaborations of EMU and Sabancı University Receives 2515 – Cost R&D Project Support from TÜBİTAK
9. **KIBRIS POSTASI**: DAÜ Öğretim Üyesi Doç. Dr. Ali Övgün, İtalya'da çalıştaya katıldı
10. **EMU NEWS**: Important Representation in the USA from EMU Physics Department Academic Staff

Member Assoc. Prof. Dr. Ali Övgün.

11. **EMU NEWS**: EMU Physics Department Academic Staff Member Assoc. Prof. Dr. Ali Övgün Delivers a Speech in Bilkent University as an Invited Speaker.
12. **Space.com**: Is Time Travel Possible? Scientists Explore the Past and Future
13. **DISCOVERY NEWS**: Wormhole Wonders: Hunting Down Spacetime Shortcuts
14. **SPACE.COM**: Chasing Wormholes: The Hunt for Tunnels in Space-Time
15. **TUBITAK BILIM VE TEKNIS DERGISI (Kasim 2015)**: Samanyolu Gokadasinda Solucan Deligi Olasiligi.
16. **EMU NEWS**: Important Research Findings from EMU Physics Department Academic Staff Member and PhD Student.
17. **EMU NEWS**: EMU Physics Program PhD Student Publishes an Article on Hawking Radiation.
18. **EMU NEWS**: EMU Physics Department Academic Staff Members Sakalli and Ovgun's Article Becomes the Most Read Publication in Cyprus.
19. **EMU NEWS**: Important Accomplishment From EMU Department of Physics Academician.
20. **EMU NEWS**: EMU Graduate Dr. Ali Ovgun To Work at CERN
21. **KIBRIS GAZETESI**: DAU Akademisyeninden Buyuk Basari.
22. **KIBRIS GAZETESI**: DAU Ogretim Gorevlisi Avrupa Fizik Dergisi'nde
23. **KIBRIS GAZETESI**: DAU Mezunu, CERN'de Calisacak
24. **DAU HABER**: Dr. Ali Ovgun CERN'de Calisacak
25. **China DWnews**
26. **SecretChina**
27. **EMU NEWS**: Huge Success from Department of Physics Academic Staff Member Assist. Prof. Dr. Ali Övgün 2018
28. **EMU NEWS**: EMU Department of Physics Academic Staff Member Asst. Prof. Dr. Ali Övgün Receives Outstanding Reviewer Award 2019
29. **DETAY KIBRIS**: Yrd. Doç. Dr. Ali Övgün'e IOP CQG dergisinden 2019 üstün hakem ödülü
30. **EMU NEWS**: 12 EMU Academic Staff Members Listed Among the World's Most Influential Scientists
31. **DETAY KIBRIS**: Dünyanın En Etkili Bilim İnsanları Listesinde DAÜ Fen Ve Edebiyat Fakültesi'nden 5 Akademisyen Yer Aldı
32. **EMU NEWS**: 14 Academics from EMU Appear in the World's Most Influential Scientists List in Stanford University's Study
33. **KIBRIS GAZETESI**: DAÜ'den 14 akademisyen 'Dünyanın En Etkili Bilim İnsanları' listesinde yer aldı
34. **YENİ ŞAFAK**: DAÜ'den 13 akademisyen Stanford Üniversitesi'nin araştırmasında dünyanın en etkili Bilim İnsanları listesinde yer aldı
35. **KIBRIS POSTASI**: DAÜ Fizik Bölümü Akademisyenleri, Nobellerin Toplantısı'nda oturum başkanlığı yaptı
36. **EMU NEWS**: EMU Physics Department Academic Staff Member Assoc. Prof Dr. Ali Övgün to Conduct Research on Black Holes with the World's Leading Scientists
37. **DAÜ HABER**: DAÜ Fizik Bölümü Öğretim Üyesi Doç. Dr. Ali Övgün Dünyanın Önde Gelen Bilim İnsanlarıyla Karadelik Araştırmaları Yapacak
38. **DAÜ HABER**: Doğu Akdeniz Üniversitesi'nden 14 akademisyen "Dünyanın En Etkili Bilim İnsanları"

listesinde yer aldı!

39. **EMU NEWS**: 6 Academicians from EMU Faculty of Arts and Sciences Appear in Stanford University's The World's Most Influential Scientists List
40. **DAÜ HABER**: DAÜ Fen ve Edebiyat Fakültesi'nden 6 Akademisyen Stanford Üniversitesi'nin Araştırmasında Dünyanın En Etkili Bilim İnsanları Listesinde Yer Aldı
41. **ADVANCED SCIENCE NEWS**: Detecting ultralight dark matter particles using supermassive black holes

Teaching Experience

Lecturer in Physics Department at Eastern Mediterranean University (as being a PhD student, Part-time Faculty Member and then Full-time Faculty Member) for undergraduate/graduate students from a variety of different departments.

PHYS101 **BSc**

Physics I: Mechanics for scientists and engineers,

PHYS102 **BSc**

Physics II: Thermodynamics and Electromagnetism for scientists and engineers,

FIZK103 **BSc**

İnşaat Mühendisliği Lisans Programı (Türkçe) Bilgisayar Mühendisliği Lisans Programı (Türkçe) Fizik I: Mekanik,

FIZK104 **BSc**

İnşaat Mühendisliği Lisans Programı (Türkçe) Bilgisayar Mühendisliği Lisans Programı (Türkçe) Fizik II: Termodinamik, Elektromanyetizma,

FIZK109 **BSc**

Fizyoterapi ve Rehabilitasyon Lisans Programı (Türkçe) Temel Fizik,

PHYS324 **BSc**

Introduction to General Relativity and Cosmology,

PHYS386 **BSc**

Astrophysics I,

PHYS472 **BSc**

Introduction to Nuclear and Particle Physics,

PHYS492 **BSc**

Cosmology I,

PHYS503 **MSc**

Introduction to Cosmology,

PHYS500 **MSc**

Master Thesis in Physics,

PHYS511 **MSc**

Mathematical Methods for Engineers and Scientists-I,

PHYS521 **MSc**

Classical Mechanics-I,

PHYS522 **MSc**

Electromagnetic Theory-I,

PHYS600 **PhD**

PhD Thesis in Physics,

PHYS603 **PhD**

Selected Topics in General Relativity - I,

PHYS621 **PhD**

Classical Mechanics-II,

PHYS622 **PhD**

Electromagnetic Theory-II ,

PHYS699 **PhD**

PhD Qualifying Exam in Physics,

References

References available upon request.