Mert MANGUT

PERSONAL DETAILS

Date of Birth	February 4, 1993
Place of Birth	Beyoglu(Istanbul)/Turkey
Phone	+90-548-8442079
Mail	mert.mangut@emu.edu.tr — mertmangut@gmail.com
ORCID	https://orcid.org/0000-0003-3364-1923

RESEARCH INTEREST

Theoretical physics or mathematical physics, general relativity, gravitational waves, classical and quantum singularities, quantum field theory, statistical physics, black holes, functional analysis, topology and differential geometry.

ACADEMIC EXPERIENCES

Lecturer and Researcher in Physics   2023 - Now
Eastern Mediterranean University, G. Magusa, North Cyprus

Research and Teaching Assistant in Physics   2018 - 2023
Eastern Mediterranean University, G. Magusa, North Cyprus

EDUCATION

PhD. in Physics   2018 - 2023
Eastern Mediterranean University, G. Magusa, North Cyprus
  Thesis: The Physics of Non-spherical Compact Objects

  Supervisor : Prof. Dr. İzzet SAKALLI
Co-supervisor : Prof. Dr. Özay GÜRTUĞ

MSc. in Mathematics   2016 - 2018
Maltepe University, Istanbul, Turkey

  Thesis: Mathematical Foundations of Quantum Singularity Analysis: Applications in Horava-Lifshitz Theory

  Supervisor : Prof. Dr. Özay GÜRTUĞ

BSc. in Mathematics   2012 - 2015

Istanbul University, Istanbul, Turkey

BSc. in Physics `2011 - 2015`
Istanbul University, Istanbul, Turkey

TEACHING EXPERIENCE

1) Teaching Assistant (Tutor) in Physics at EMU for undergraduate students studying in the departments of Engineering, Medicine, Mathematics and Physics. (as being PhD student)

PHYS101 `2019 - 2023`
Physics I: Mechanics
PHYS102 `2019 - 2023`
Physics II: Thermodynamics and Electromagnetism
PHYS103 `2020 - 2023`
Introductory Physics
FIZK103 `2019 - 2023`
Fizik I: Mekanik
FIZK104 `2019 - 2023`
Fizik II: Termodinamik ve Elektromanyetizm
PHYS204 `2022 - 2023`
Modern Physics
PHYS101, PHYS102, PHYS111, PHYS109, FIZK109
FIZK103, PHYS204 and FIZK104 `2019 - 2023`
Lab. Sessions

2) Lecturer in Physics at EMU for undergraduate students studying in the departments of Engineering, Mathematics and Architecture. (as being PhD student)

Table 1: Teaching

Course	Academic Year	Term	Weekly Hour (Lecture and Tutorial)		
FIZK 103	2020-2021	Spring	**6**	4	2
FIZK 103	2021-2022	Spring	**6**	4	2
PHYS 101 (Gr:03/11)	2022-2023	Fall	**6**	4	2
FIZK 103	2022-2023	Fall	**6**	4	2

3) Lecturer in Physics at EMU for undergraduate students studying in the departments of Engineering, Mathematics and Architecture. (as being Faculty Member)

Table 2: Teaching

Course	Academic Year	Term	Weekly Hour (Lecture and Tutorial)		
FIZK 104	2023-2024	Fall	**6**	4	2
FIZK 109 (Gr:02/01)	2023-2024	Fall/Spring	**6**	4	2
PHYS 101 (Gr:03/09)	2022-2023	Fall	**6**	4	2
FIZK 103	2023-2024	Spring	**6**	4	2
PHYS 102 (Gr:06)	2023-2024	Spring	**6**	4	2
PHYS 212	2023-2024	Spring	**6**	4	2

PUBLICATIONS IN PEER REVIEWED JOURNALS

1. O. Gurtug and **M. Mangut**, **"Quantum Probe of Hořava-Lifshitz Gravity"**, Journal of Mathematical Physics 59, 042503, (2018).

2. O. Gurtug and **M. Mangut**, **"Effect of power-law Maxwell field to the gravitational lensing"**, Physical Review D 99, 084003, (2019).

3. O. Gurtug and **M. Mangut**, **"Gravitational Lensing in a Model of Nonlinear Electrodynamics: The Case for Electrically and Magnetically Charged Compact Objects"**,Annalen der Physik 532, 3, 1900576, (2020).

4. M. Mangut and O. Gurtug , **"Quantum probe of time-like naked singularities for electrically and magnetically charged black holes in a model of nonlinear electrodynamics"**, Modern Physics Letters A 35, 29, 2050242, (2020).

5. H. Gürsel, **M. Mangut** and I. Sakallı , **"Holographic Dissipative Properties of Non-relativistic Black Branes with Hyperscaling Violation"**,Eur. Phys. J. Plus 136, 9 (2021).

6. O. Gurtug, **M. Mangut** and M. Halilsoy , **"Gravitational Lensing in Rotating and Twisting Universes"**,Astroparticle Physics, 128, 102558 (2021).

7. O. Gurtug, M. Halilsoy and **M. Mangut** , **"The charged Zipoy–Voorhees metric with astrophysical applications"**, Eur. Phys. J. C, 82, 671 (2022).

8. M. Mangut , H. Gürsel and I. Sakallı , **"Gravitational lensing in Kerr–Newman anti de Sitter spacetime"**, Astroparticle Physics, 102763 (2022).

9. M. Mangut , H. Gürsel, S. Kanzi and I. Sakallı , **"Probing the Lorentz Invariance Violation via Gravitational Lensing and Analytical Eigenmodes of Perturbed Slowly Rotating Bumblebee Black Holes"**, Universe, 9(5), 225 (2023).

10. O. Gurtug, M. Halilsoy and **M. Mangut** , **"Probing naked singularities in the charged and uncharged $\gamma - metrics$ with quantum wave packets"**, General Relativity and Gravitation, vol. 55, no. 98, 2023.

11. M. Halilsoy, **M. Mangut** and Chia-Li Hsieh , **"Stationary, charged Zipoy-Voorhees metric from colliding wave spacetime"**, General Relativity and Gravitation, vol.55 , no.103 , 2023.

12. M. Halilsoy, Chia-Li Hsieh and **M. Mangut** , **"Colliding null matter with a specific stress tensor"**, Physica Scripta, vol. 99, no: 3, 035023 , 2024.

13. **M. Mangut**, O. Gürtuğ and I. Sakallı , **"On thermal fluctuations and quantum regularities of $\mathcal{F}(R,\mathcal{G})$ gravity black holes with constant topological Euler density in nonlinear electrodynamics"**, Physica Scripta, vol. 99, no: 5, 055005, 2024.

RELEVANT EXPERIENCE

Speaker and Organization Committee Member at EMU 2nd Astronomy Workshop Aug .2023

Eastern Mediterranean University, G. Magusa, North Cyprus

 Title: The Internal Structure of Stars

Speaker at The Madrid Winter Workshop on Theoretical Physics Dec. 2022

Departament of Theoretical Physics and the Instituto de Particulas y Fisica del Cosmos (IPARCOS) of the Complutense University of Madrid, Spain

 Title: On Charged Zipoy-Voorhees Metrics

Speaker and Organization Committee Member at EMU 1st Astronomy Workshop Aug .2022

Eastern Mediterranean University, G. Magusa, North Cyprus

 Title: Stellar Evolution

Speaker at 19th Workshop on Quantization, Dualities and Integrable Systems April -2021

University of Turkish Aeronautical Association, Ankara, Turkey (online due to COVID-19)

 Title: Effect of power-law Maxwell field to the gravitational lensing for using Rindler and Ishak method

Local Organization Committee Member at 2nd International Conference of Mathematical Sciences July 2018
Maltepe University, Istanbul, Turkey

 Analytic Topology and Applications; Functional Analysis; Sequences, series, summability; Mathematical Methods in Physics

Poster Presentation at Faculty of Science June 2015
Istanbul University, Istanbul, Turkey

 Title: Quasi Periodic Oscillations in Reissner - Nordström Spacetime

Summer school of Physics at Feza Gursey Institute Aug. − 2013
Bogazici University, Istanbul, Turkey

Organization Committee Member at 3rd Physics Workshop Feb.−2013
Istanbul University, Istanbul, Turkey

 Astroparticles, High Energy Physics and Solid State Physics

MEMBERSHIPS

1. American Mathematical Society (AMS).
2. Turkish Mathematical Society (TMS).

SCHOLARSHIPS, ACHIEVEMENTS & AWARDS

Honour Price & Nature Index-2022 Publications   April 2022
Eastern Mediterranean University, G. Magusa, North Cyprus

Honour Price & First Degree in Graduation, Institute of Science   June 2018
Maltepe University, Istanbul, Turkey

Honour Price & First Degree in Graduation, Faculty of Science   June 2015
Istanbul University, Istanbul, Turkey

Scholarship for Higher Education   2012 - 2015
TEV (Turkish Education Foundation)

Award of Achievement in Higher Education   2014 - 2015
TEV (Turkish Education Foundation)