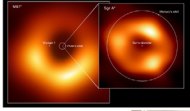




EMU PHYSICS DEPARTMENT ACADEMIC STAFF MEMBER ASSOC. PROF. DR. ALİ ÖVGÜN'S JOINT SCIENTIFIC ARTICLE WITH CAMBRIDGE UNIVERSITY SCIENTISTS PUBLISHED



CLASSICAL AND QUANTUM GRAVITY

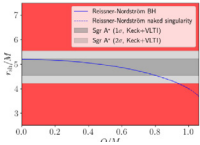
Horizon-scale tests of gravity theories and fundamental physics from the Event Horizon Telescope image of Sagittarius A*

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group of 14 scientists from Cambridge University and various locations worldwide, is exploring the mysterious world of black holes and their shadows. This research, which holds significant potential for reshaping our understanding of the universe, has been published in the high-impact journal Classical and Quantum Gravity by the Institute of Physics, established in 1874 in the United Kingdom (Class. Quant. Grav. 40 (2023) 165007, <https://iopscience.iop.org/article/10.1088/1361-6382/acd97b>).

The Team Makes Significant Contributions to Science

The study titled “Horizon-scale tests of gravity theories and fundamental physics from the Event Horizon Telescope image of Sagittarius A*” takes a bold step towards addressing well-motivated deviations from classical General Relativity (GR) black hole solutions, utilizing the impressive capabilities of the Event Horizon Telescope

(EHT). Through observations of the object known as Sagittarius A* (Sgr A*) using the Event Horizon Telescope, the team has made significant progress in relating the size of the bright emission ring to the size of the black hole shadow beneath it. Additionally, the researchers utilized high-precision measurements of the mass-distance ratio of Sgr A* to support their research. Assoc. Prof. Dr. Ali Övgün, along with 14 scientists from institutions including Cambridge University in the United Kingdom and the University of California in the United States, explored a range of scenarios that could provide critical insights into the secrets surrounding black holes. Their investigations encompass various regular black holes, spacetimes based on string theory, violations of the strong cosmic censorship conjecture by extra fields, structures like wormholes, alternatives in gravitational theories, and new frameworks in fundamental physics.

Eastern Mediterranean University (EMU) Faculty of Arts and Sciences, Department of Physics academic staff member Assoc. Prof. Dr. Ali Övgün, in collaboration with a distinguished

2ND EMU ASTRONOMY SUMMER WORKSHOP ORGANIZED WITHIN THE COLLABORATION OF EMU AND NEW HORIZON TAKES PLACE WITH GREAT PARTICIPATION

The 2nd EMU Astronomy Summer Workshop organized within the collaboration of Eastern Mediterranean University (EMU) and New Horizon Initiative was held with great participation. Organized for high schoolers in the Turkish Republic of Northern Cyprus (TRNC), the workshop took place on 3-4 August, 2023 at EMU Arts and Sciences Faculty and EMU Beach Club.

The 2nd EMU Astronomy Summer Workshop commenced on 3 August 2023 with various presentations delivered by New Horizon Initiative volunteer members; “Space: Final Border” by Yenal Ögmen, “Big Bang, Different Agers and Ultimate Future of the Universe” by İbrahim E. Erkan, “Subatomic Particles, Anti-material, Higgs Boson and Anti-Gravity” by Gözde Soyel, “Hidden Face of the Galaxy” by Tutku Kolcu and “Aerospace Engineering” by Sedat İzcan. Moreover, EMU Department of Physics Distinguished Professor and Turkish Cypriot theoretical physicist Prof. Dr. Mustafa Halilsoy delivered a presentation titled “Astronomy and Science” and, EMU Department of Physics research assistant Elham Poorkahnoji delivered a presentation titled “Does Life Exist Outside of the Solar System?”. EMU Arts and Sciences Faculty Vice Dean Assist. Prof. Dr. Mehmet Bozer also attended the event.

The second day of the event, 4 August 2023, consisted of two sessions: presentations and night observations. In the event, EMU Physics Department research member and New Horizon Initiative volunteer member Mert Mangut delivered a presentation titled “The Evolution of Stars”. Other presentations were; “Mysterious Holes in the Universe: Black Holes and Wormholes” by EMU Physics Department academic staff member Assoc. Prof. Dr. Ali Övgün, Sabancı “Dark Matter” by Prof. Dr. Durmuş Ali Demir and “James Webb Galaxies” by Dr. Ece Kilerci who attended the event online from Sabancı University, “Nothingness and Black Holes” by EMU Physics Department academic staff member and New Horizon Initiative volunteer member Assist. Prof. Dr. Huriye Gürsel Mangut, “Our Planet and Atmospheric Phenomena” by New Horizon

Initiative volunteer member Sinem Karaköse and lastly, “Understanding of Universe: From Maxwell to Einstein” by EMU Physics Department Vice Chair Prof. Dr. Seyedhabibollah Mazharimousavi.

Night Observations with Telescopes

On the second day of the Astronomy Workshop, the 4th of August 2023, high school students, New Horizon Initiative volunteer members, EMU Arts and Sciences Faculty, Physics and Chemistry Departments’ Chair Prof. Dr. İzzet Sakallı and academic staff members made night observation between 21:00 – 23:00 at EMU Beach Club. EMU Vice Rector for Social and Cultural Affairs Prof. Dr. Deniz İççioğlu and Arts and Sciences Faculty Dean Prof. Dr. Mehmet Ali Özarslan also attended the night observations with telescopes.



EMU FACULTY OF TOURISM'S PROJECT RECEIVES INSTITUT PAUL BOCUSE ALLIANCE RESEARCH AWARD



Eastern Mediterranean University (EMU) Tourism Faculty's project received Research Award from Institut Paul Bocuse Alliance. Being one of the most prestigious institutions in the field of Tourism Management and Gastronomy, the Institut Paul Bocuse Alliance decided to support only two projects amongst the 2023-2024 research project applications. One of the projects awarded is EMU Faculty of Tourism's project.

With the "Unsustainability on the Horizon: Concerns over RAISA, Future Career Anxiety and Their Effects on Hospitality, Culinary, and Tourism Students' Critical Outcomes" project, Tourism Faculty became prominent among all other applications and received the right to be supported by the 2023-2024 Institut Paul Bocuse Alliance Research Fund. The achievement of the

EMU Tourism Faculty made the faculty proud on both national and international platforms.

The said project is to be carried out with the guidance of EMU Tourism Faculty academic staff member Assist. Prof. Dr. Hamed Rezapoughdam and will examine in-depth how RAISA-related (Robotics, Artificial Intelligence and Service Automation) concerns affect students' various attitudes and behaviors, including their future career anxieties, career change intentions, and dissatisfaction with their major. The research project aims to provide importance contributions to the training future professionals of tourism, accommodation, catering sectors as well as culinary arts professionals.

The achievement of EMU Tourism Faculty will not only increase the international level of recognition the university has but also will strengthen the research and educational collaborations between students and academic staff members. EMU Faculty of Tourism Dean Prof. Dr. Hasan Kılıç made a statement on the topic and said that as the Dean of EMU Tourism Faculty, he expressed that he is very proud and pleased that the project has been honored by the Institut Paul Bocuse Alliance. Moreover, Prof. Dr. Kılıç stated that this success is an important milestone for the Faculty and that he believes that they will undertake similar projects in the future as the EMU Tourism Faculty. Prof. Dr. Kılıç also said that the project will contribute to the sector and make an important contributions to the training of

professionals who will work in the fields of tourism, accommodation and culinary arts in the future.

The Institut Paul Bocuse Alliance is a unique leader and global network of excellence in higher education, bringing together 26 partner schools and universities across 4 continents. The Alliance aims to encourage and develop the hospitality, foodservice and culinary arts management professions while taking cross-training experience as a foundation. Founded by Institut Paul Bocuse in 2004, the Alliance has become a truly international center of expertise in tourism and hospitality management, food service and culinary arts education in 22 countries such as Turkey, Canada, Thailand, Cyprus, France, Mexico, Finland, Chile, Cameroon, Singapore, Malta, United States, Greece, Taiwan, Russia, Indonesia, Colombia, Bolivia, Ecuador, Peru, Lebanon and South Korea.



EASTERN MEDITERRANEAN UNIVERSITY (EMU) FACULTY OF TOURISM AWAITS NEW STUDENTS

In the current era of increased international competition, economic development, and accelerated technological advancements, Eastern Mediterranean University (EMU) Faculty of Tourism continues to educate highly qualified individuals at various levels, contributing to the tourism sector's economic and social growth. These individuals possess the necessary knowledge, skills, and consciousness demanded by the sector.

For the academic year 2023-2024, EMU Faculty of Tourism is welcoming new students to its programs, including associate degree programs in Culinary Arts, Pastry and Baking, Civil Aviation Cabin Services, and Tourism and Hospitality Management, as well as bachelor's programs in Gastronomy and Culinary Arts, Recreation and Tourism Management, and Tourism and Hospitality Management. The faculty also offers master's programs in Gastronomy, Hospitality Management, and Tourism Management, as well as a doctoral program in Tourism Management.

Among the World's Best

EMU Faculty of Tourism has achieved recognition on the global stage, as it ranks 40th in the field of Tourism and Hotel Management in the latest ShanghaiRanking's Academic Ranking of World Universities by Broad Subject Fields. This achievement makes the said faculty the only faculty from Northern Cyprus to be included in the list and positions it as the top faculty on both the island of Cyprus and amongst universities in Turkey.

Furthermore, the EMU Faculty of Tourism holds accreditation from The Foundation for International Business Administration Accreditation (FIBAA), one of the world's most esteemed accreditation organizations, for its bachelor's program in Tourism and Hospitality Management and its master's program in Tourism Management.

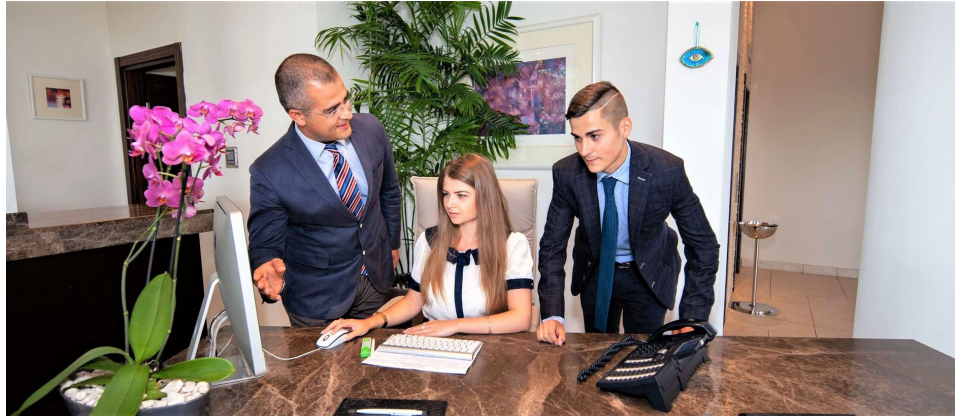
International Collaborations

In its pursuit of providing students with global opportunities, EMU Faculty of Tourism collaborates with the Italian Culinary Institute for Foreigners (ICIF) to offer students in the Gastronomy and Culinary Arts program and the Tourism and Hotel Management program the chance to receive education in Italy. Additionally, through an educational partnership agreement with Virginia Tech University, students can complete their final semester at Virginia Tech University in the United States. The faculty also facilitates student exchange programs, sending around 30 students abroad for education and internships in countries such as Italy, Germany, South Korea, and Taiwan.

The EMU Faculty of Tourism is a member of The Alliance by Institut Paul Bocuse, a group of institutions specializing in culinary arts, gastronomy, food service, and hospitality education, allowing students to access international information sharing opportunities.

State-of-the-Art Laboratories for Education

Fully equipped computer laboratories within the faculty enable students to reinforce their theoretical



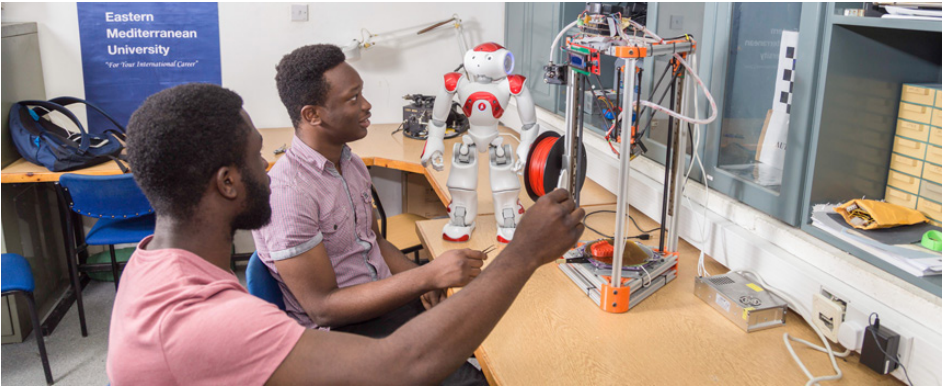
learning. Furthermore, students receive training in the Fidelio program, preferred by the world's largest hotel chains. The faculty's two demo kitchens, equipped with advanced technology, allow students to grasp the principles of running a professional kitchen. The Tower Barista Cafe and Training Laboratory provide a space for students to learn and practice food and beverage service and management techniques.

Prof. Dr. Kılıç: "We have Integrated Business and Education, A New Educational Model Implemented"

Dean of the EMU Faculty of Tourism, Prof. Dr. Hasan Kılıç, emphasized that the faculty produces specialised and qualified graduates, boasting multicultural programs with adequate technological infrastructure. Prof. Dr. Hasan Kılıç highlighted that EMU is the leading academic institution for tourism education in the region,

with its education quality validated by international organizations. Prof. Dr. Kılıç also noted the diverse career opportunities available to graduates, ranging from positions in hotels, including accommodation, front office, housekeeping, marketing, accounting, human resources, kitchen, bar, and restaurant departments, to roles in entertainment, transportation, travel agencies, catering, and various tourism-related industries. Graduates can even establish their own businesses, provide consultancy services to organizations, or pursue careers in food writing, blogging, and related fields. Prof. Dr. Kılıç underscored the integration of academic education with practical experience, explaining that students spend their final years in the program gaining experience through a combination of education and internships coordinated by the faculty, facilitating job placement before graduation.

EMU FACULTY OF ENGINEERING AWAITS NEW STUDENTS



Eastern Mediterranean University (EMU) Faculty of Engineering, accredited by ABET, one of the world's leading accreditation bodies, is ready to welcome its new students for the 2023-2024 Fall Semester. Having initiated its educational journey in 1979, the EMU Faculty of Engineering is known for producing fully-equipped engineers on a global scale. The faculty houses departments in Computer Engineering, Electrical and Electronic Engineering, Industrial Engineering, Civil Engineering, and Mechanical Engineering.

Among the World's Top Engineering Faculties

In the 2023 world university rankings released by Times Higher Education (THE), a prominent reference for university rankings worldwide,

EMU was placed in the range of 301-400 in Engineering last year. Despite the addition of 120 universities to the list this year, EMU demonstrated a significant rise by progressing to the band of 251-300, reflecting its notable improvement. While four universities from Cyprus made it to the list in this category, among the 44 Turkish universities listed, EMU shares the third place with Bahçeşehir University, Düzce University, and Sabancı University.

A Global Active Player

Programs including Computer, Electrical and Electronic, Civil, Mechanical, Industrial, Mechatronics, Software, Artificial Intelligence, Biomedical, Information Systems, and Electronic Communications Engineering stand out as

ABET-accredited programs. EMU Faculty of Engineering students and faculty members are affiliated with prestigious international organizations and associations such as ACM, ASEE, EDC, EEDC, ASME, EAEEIE, EESTEC, ESTIEM, IIE, ACI, ASCE, ICE, ISCP, IAHR, ISSMGE, and FEANI. The Faculty's departments offer value-added services like double major programs, student and faculty exchange with numerous universities in the US, EU, and Canada, as well as active participation in international student organizations and associations.

“Preparing for the Future”

Addressing the topic, Prof. Dr. Hüseyin Özkaramanlı, the Dean of EMU Faculty of Engineering, stated, “Within the framework of our quality assurance system, we educate our students to become individuals with learning skills, proficient in English, aware of international cultural differences, and equipped with the skills to use information and communication technologies, alongside their professional knowledge, preparing them for the future. We closely monitor advancements in technology and science and support university-industry collaboration. The Faculty of Engineering offers double major programs, student and faculty exchange with universities in various countries, and value-added services like active participation in international student organizations and associations.”

Prof. Dr. Özkaramanlı continued, “Our graduates continue with postgraduate studies aligned with our program's objectives or embark on their careers as entrepreneurial engineers. As a higher education institution, our university places great importance on enhancing the quality of education. We invite you to become part of a wide campus environment, where you will benefit from quality education and advanced research, surrounded by a cultural mosaic of international students from 98 different countries, while gaining professional engineering skills and accessing significant opportunities.”

THE FILM “PROSPECTIVE GROOM” THE SCENARIO OF WHICH HAS BEEN SUPERVISED BY EMU FACULTY OF COMMUNICATION ACADEMIC STAFF MEMBER ASSIST. PROF. BARÇIN BOĞAÇ IS NOW AVAILABLE ON NETFLIX

Eastern Mediterranean University Faculty of Communication announced that the film “Prospective Groom,” in which Assist. Prof. Dr. Barçın Boğaç from the Cinema and Television Department served as a scenario consultant, has been released on Netflix.

The movie, directed and acted by producer, director, actor, and presenter İlker Ayrık, was filmed in Cyprus and released in theaters in 2022 through Pervasız Yapım, one of Turkey’s most prestigious production companies. The film’s director and lead actor, İlker Ayrık, is accompanied by renowned actors such as Erdal Özyağcılar, Hande Soral, Nilgün Kasapbaşoğlu, Yücel Erten, Bilge Şen, and Suat Sungur.

In the film, which features various locations in Cyprus and was



supervised in terms of scenario by Assist. Prof. Dr. Barçın Boğaç from EMU’s Cinema and Television Department, İlker Ayrık, in the role of the groom, portrays a character who falls in love with the daughter of a Cypriot family according to the script and finds himself in Northern Cyprus. “Prospective Groom,” centered around the relationship between the groom and his father-



in-law, depicts the humorous incidents that occur as the groom tries to win over his Cypriot father-in-law.

The film captures Cypriot culture and all the beauties of Cyprus. The team from Pervasız Yapım, who took charge of producing the film, succeeded in reflecting the local texture accurately with the guidance

of Assist. Prof. Dr. Boğaç in terms of the scenario. In his statements about the subject, Assist. Prof. Dr. Boğaç emphasized the importance of the film’s contribution to introducing the country’s culture and positively impacting the country’s tourism from an accurate perspective, highlighting that the film’s release on a platform like Netflix is extremely significant.

EMU-CEC CONTINUES TO OFFER EDUCATION DURING THE SUMMER MONTHS

Eastern Mediterranean University (EMU) Continuing Education Center (EMU-CEC) is providing English education to students who have come to EMU within the scope of the EMU International Summer School, with its expert teaching staff. Students from various countries including Palestine, Russia, Kazakhstan, Turkey, and Iran who have come to EMU for the International Summer School are receiving education at A1, A2, and B1 levels from EMU-CEC instructors.

With its team of expert educators and the experience of hosting international guests during the summer months, EMU is among the institutions preferred by students every year. Participants in the education provided by EMU-CEC within the scope of the International Summer School are eligible to receive internationally recognized certificates upon the completion of their courses. Since 2004, EMU-CEC has been organizing various courses and training programs based on the concept of lifelong learning. Its main aim is to meet the educational needs of public and private sector institutions and organizations as well as individuals who wish to receive

education at both national and international levels. EMU-CEC offers various educational programs, courses, workshops, seminars, certificate programs, and conferences.

Education Provided in Various Fields

EMU-CEC offers education in many fields aimed at individual and professional development. In addition to courses organized in areas such as language, health, communication, occupational health and safety, law, and engineering, it also

provides services to university students and professionals to prepare for and participate in internationally recognized exams. As a center authorized to administer exams such as TOEFL-IBT and TOLES, EMU-CEC also offers preparatory courses for those wishing to take such exams throughout the year. Detailed information about the courses provided by EMU-CEC can be obtained by contacting 630 2471 or via the email address dausem@emu.edu.tr.



TROPICAL LATIN NIGHT ORGANIZED AT EMU

On August 10, 2023, Thursday, at 8:00 PM, the International Student Activities and Student Societies Unit operating under the Eastern Mediterranean University Social and Cultural Activities Directorate organized a Tropical Latin Night event at the EMU Beach Club. Attended by Prof.

Dr. Deniz İşcioğlu, Vice Rector for Social and Cultural Affairs, the event received significant interest from students from various countries.

During the vibrant event, attendees enjoyed the music and dances of Latin culture

accompanied by DJ Beerdboi, guitarists, and dance artists. Participants were served with food and tropical drinks during the event. Students enthusiastically took photos amidst the ambiance created by handmade colorful decorations prepared specifically for the occasion.



This Week's Academic Publications

Source: *Web of Science*

Faculty of Pharmacy

1- **Kunter, Imge**, Niloufar Zabib, Fatih Goger, and **Muberra Kosar**. "New Data for Endemic *Phlomis Brevibracteata* Turill from North Cyprus: Biological Activities and Chemical Composition." *TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI*, 2023.

2- Rahmani, Farzad, **Saghi Naderpour**, Behnam Ghorbani Nejad, Milad Rahimzadegan, Zivar Nejad Ebrahimi, Hossein Kamali, and Rahim Nosrati. "The Recent Insight in the Release of Anticancer Drug Loaded into PLGA Microspheres." *MEDICAL ONCOLOGY* 40, no. 8 (July 2023).

3- Fath, Mohsen Karami, Ramtin Akhavan Masouleh, Negin Afifi, Shirin Loghmani, Parham Tamimi, Alireza Fazeli, **Seyed Ali Mousavian**, Mohammad Mehdi Falsafi, and Ghasem Barati. "PI3K/AKT/MTOR Signaling Pathway Modulation by Circular RNAs in Breast Cancer Progression." *PATHOLOGY RESEARCH AND PRACTICE* 241 (January 2023).

Faculty of Communication and Media Studies

1- **Toluk, Pembe**, and **Bahire Ozad**. "Medical Aid under the Shadow of the Covid-19: A Political Crisis among

the Leadership in North Cyprus." *MEDITERRANEAN POLITICS*, 2023. (Early Access)

Faculty of Arts & Sciences

1- **Mustafa, Omar**. "PDM Klein-Gordon Particles in Som-Raychaudhuri Cosmic String Spacetime with Space-like Dislocation and a Magnetic Field: Spacetime Associated Degeneracies, Vorticity-Energy, and Charge-Energy Correlations." *INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS*, 2023. (Early Access)

2- Liu, Dong, Yi Yang, **Ali Ovgun**, Zheng-Wen Long, and Zhaoyi Xu. "Gravitational Ringing and Superradiant Instabilities of the Kerr-like Black Holes in a Dark Matter Halo." *EUROPEAN PHYSICAL JOURNAL C* 83, no. 7 (July 2023).

3- **Abbasi, Akbar**, Hesham M H Zakaly, and Nouf Almousa. "Radiotoxic Fission Products and Radiological Effects in the Mediterranean Sea Biota from a Hypothetical Accident in Akkuyu Nuclear Power Plant." *MARINE POLLUTION BULLETIN* 193 (August 2023). <https://doi.org/10.1016/j.marpolbul.2023.115166>.

4- Swift, Bethan, **Bahar M Taneri**, Ilgin T Cagnan, Christian A Becker, Krina Zondervan, Maria Quigley, and Nilufer Rahmioglu. "Predictors and Trends of Caesarean

Section and Breastfeeding in the Eastern Mediterranean Region: Data from the Cross-Sectional Cyprus Women's Health Research (COHERE) Initiative." *PLOS ONE* 18, no. 7 (July 2023).

Faculty of Engineering

1- Mousavi, Seyyed Mohammad Javad, Ebrahim Babaei, Mehran Sabahi, and **Hasan Komurcugil**. "A Class of Bidirectional Single-Phase Z-Source AC-AC Converter With Continuous Input Current and Reduced Component Count." *IEEE TRANSACTIONS ON POWER ELECTRONICS* 38, no. 5 (May 2023): 6311-18.

2- Karimzadeh, Sina, **Babak Safaei**, Chris Yuan, and Tien-Chien Jen. "Emerging Atomic Layer Deposition for the Development of High-Performance Lithium-Ion Batteries." *ELECTROCHEMICAL ENERGY REVIEWS* 6, no. 1 (December 2023).

3- Kwon, Ju-Hyeok, Min-Kyu Ji, Ramesh Kumar, Md. Monjurul Islam, Moonis Ali Khan, Young-Kwon Park, Krishna Kumar Yadav, **Roohbeh Vaziri**, et al. "Recent Advancement in Enhanced Soil Flushing for Remediation of Petroleum Hydrocarbon-Contaminated Soil: A State-of-the-Art Review." *REVIEWS IN ENVIRONMENTAL SCIENCE AND BIO-TECHNOLOGY*, 2023. (Early Access)

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