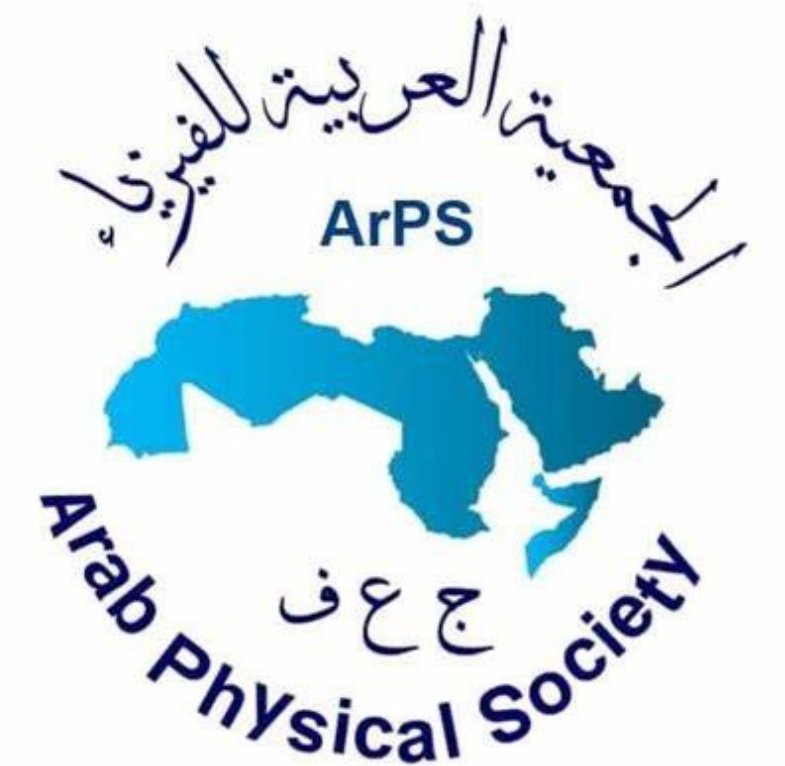


Arab Physical Society (ArPS)

الجمعية العربية للفيزياء

Prof. Shaaban Khalil
ArPS President

8th African School of Physics, ASP2024
Marrakesh, Morocco
July 10, 2024



Introduction

A physical society for the Arab world is very important to facilitate and promote joint scientific research among Arab physicists.

Several physical societies exist in different regions all over the world, as the European Physical Society, American Physical society, African Physical society, etc.

After several discussions and meetings with Arab physicists, we decided to establish the Arab Physical Society (APS) as the first physical society in the Arab world.

The Arab Physical Society (ArPS)

ArPS is a non-profit membership organization dedicated to the dissemination and promotion of physics knowledge across the Arab world. Its mission focuses on enhancing scientific education, fostering research, and building human capacities in the field of physics.

Our Vision

We are a collective of professional Arab researchers in physics and its various applications. Our aim is to advance physics knowledge and drive scientific research within the Arab world.

Membership

Current Number of Society Members: 1,200

The ArPS Founding Committee

The Arab Physical Society was born on April 29th, 2021. In the constituent meeting, the co-founders:



Shabaan Khalil
President



Fairoz Malek
Vice President



Ammar Sakaji
Financial Manager



Farida Fassi
Scientific Affairs Director



Mohammed Fellah
Secretary General

Advisory Committee (AC)

AC consisting of one Arab physicist from each Arab country. The AC will provide advice and work with the GC in setting up the proper strategy to ensure success of the society activities.

Launching Event of the Arab Physical Society on Thursdays April 7, 2022.

المعهد العربي للفيزياء
APS
Arab Physical Society
2022

الجمعية العربية للفيزياء
Arab Physical Society (APS)
Launching April 7th
Online Event 2022

تطلق الفعالية الفيزيائية لشهر إبريل 2022
حيث يتحدث إليكم علماء فيزياء متخصصون

World's leading physicists will present the most
important physics research results

 <p>Prof. Roger Penrose Nobel Prize in Physics 2020 on Black Holes Cambridge University, UK</p>	 <p>Prof. Takashi Inami Nobel Laureate 2015 Laureate for Discovery of neutrino oscillations Tokyo College, Japan</p>	 <p>Prof. Gerard 't Hooft 1999 Nobel Prize in Physics, Dutch theoretical physicist and professor at Utrecht University, the Netherlands</p>	 <p>Prof. Edward Witten 1990 Fields Medal, American mathematical and theoretical physicist, String Theory, Institute for Advanced Study, USA</p>
 <p>Prof. John Ellis Dirac Award 2005 on Particle Physics, King's College London, UK</p>	 <p>Prof. Gisela Faber Max Planck Institute, Germany</p>	 <p>Prof. Charles Kane Dirac Prize, 2012 Breakthrough Prize in Fundamental Physics, USA</p>	 <p>Prof. Pablo Julio Herrera Wolf Prize in Physics (2020), Carl and Lila Green Endowment of Princeton, USA</p>



The inauguration of the Arab Physical Society took place under the patronage of Prince Hassan bin Talal, who delivered a compelling welcome speech.

The ArPS Current Governing Council



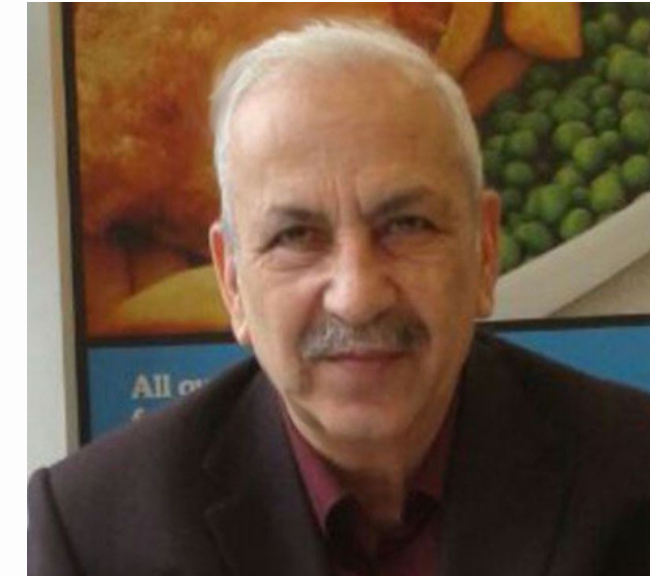
Shabaan Khalil
President



Shawqi Al Dallal
Vice President



Ali Abdou



Riyadh Mirza



Ammar Sakaji



Nidal Chamoun



Mahmoud Abdel-Hafiez



Hichem El Euch



A.M. Shalaby

ArPS Mission and Objectives

Mission

Promote excellence and creativity in physics for the benefit of the Arab region and humanity.

Objectives

- Facilitate Collaboration: Among researchers and students in the Arab region.
- Organize Events: Scientific and educational activities.
- Support Postgraduate Studies: With joint supervision.
- Highlight Physics' Impact: On economy and social progress.
- Promote Cooperation: In physics education and latest research.
- Form Scientific Committees: At the Arab regional level and internationally.
- Award Recognitions: To distinguished physicists.

Arab Physical Society Activities

Eight Physics Working Groups

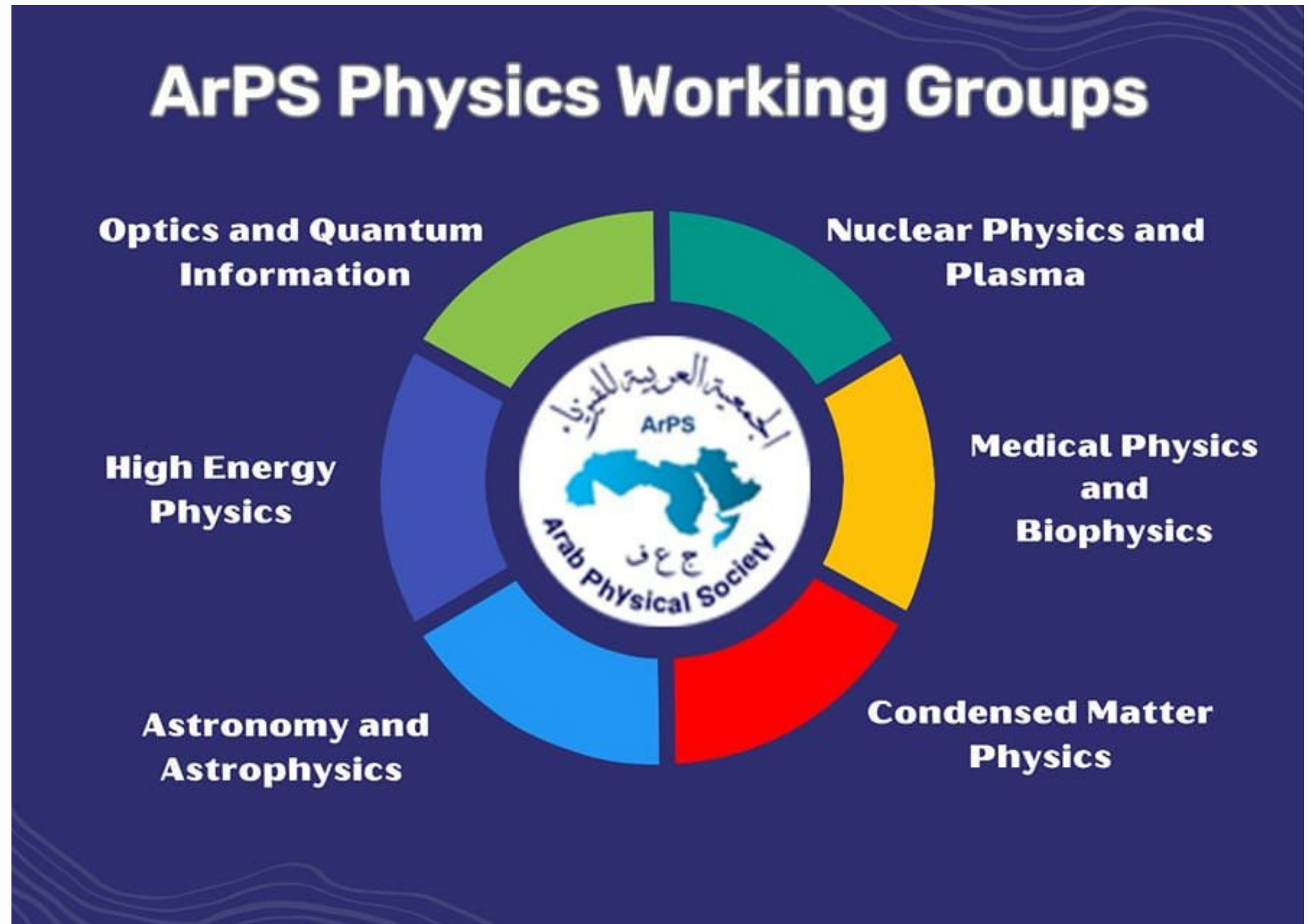
Monthly Seminars and Colloquium Lectures

Schools, Workshops and Conferences

Trends in Physics Magazine (مجلة مسارات في الفيزياء)

ArPS Physics Working Groups

- High Energy Physics
- Astrophysics and Astronomy
- Condensed Matter Physics
- Medical Physics and Biophysics
- Optics, Laser and Photonics
- Nuclear Physics and Plasma
- Quantum Information and Quantum Computing
- Outreach and Physics Education



Seminars and Colloquium Lectures

ArPS organizes a monthly remotely colloquium lecture.

Each ArPS working group holds a series of seminars in their field of interest.

Cosmological Inflation:
modified gravity versus
warming

Prof. Nidal Chamoun



FIRST SEMINAR OF THE HIGH ENERGY GROUP
COSMOLOGICAL INFLATION: MODIFIED GRAVITY VERSUS WARMING

Prof. Nidal Chamoun

- A member of the Governing Council of the Arab Physical Society.
- Professor at the Higher Institute of Applied Sciences and Technology in Damascus, SYRIA.

TUESDAY, NOVEMBER 7, 2023

Online, Zoom

Dark Matter Dark Energy
and Fate of the Universe

Prof. Shaaban Khalil



THE SEMINAR OF THE HIGH ENERGY PHYSICS GROUP
DARK MATTER DARK ENERGY AND FATE OF THE UNIVERSE

Prof. SHABAAN KHALIL

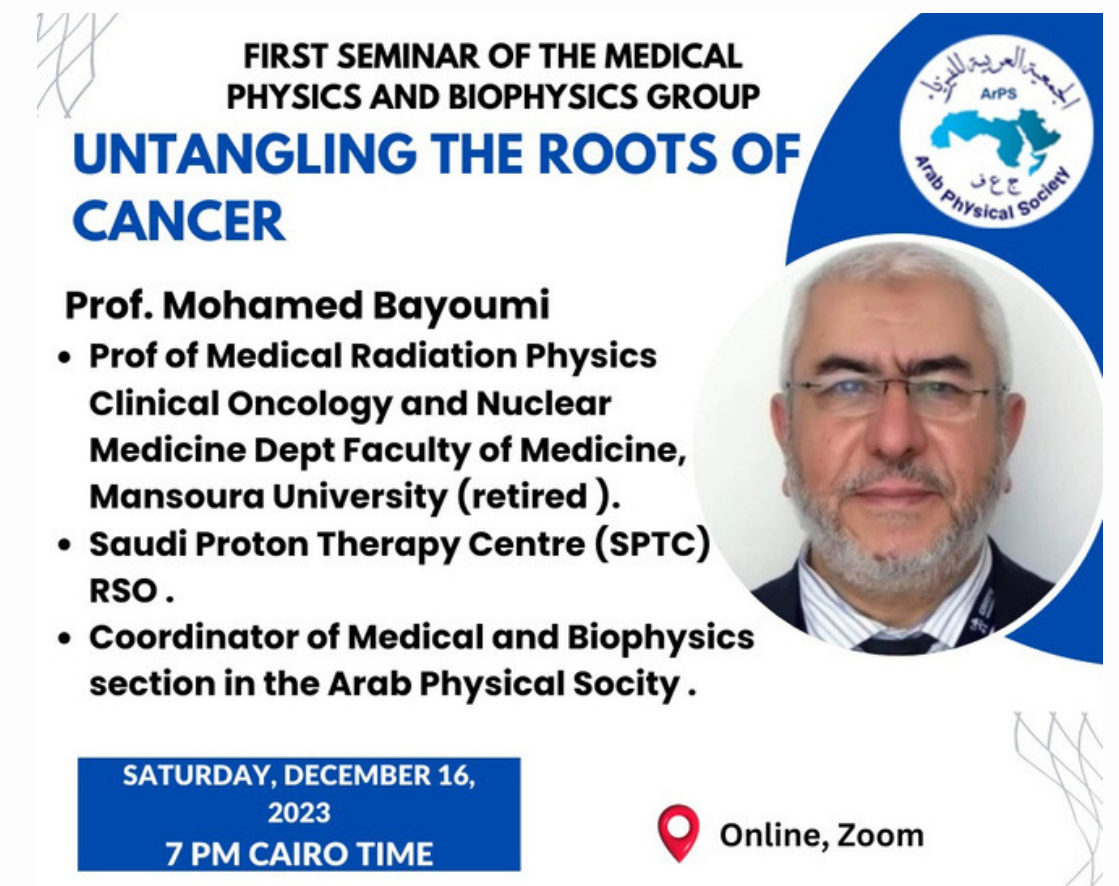
- HE is one of the prominent high-energy physics in the Middle East.
- He is the founding director of the center for Fundamental Physics at Zewail City of Science and Technology in Egypt, since 2012.
- He also the co-author of two books on particle physics, published in CRC press in the UK.
- HE was the founding team leader of the Egyptian particle group at the CMS experiment at CERN, Geneva, Switzerland.
- He is the president of Arab physical society.

SATURDAY, 20 January, 2024. 6PM GMT.

ONLINE, ZOOM

Untangling the roots of
cancer

Prof. Mohamed Bayoumi



FIRST SEMINAR OF THE MEDICAL PHYSICS AND BIOPHYSICS GROUP
UNTANGLING THE ROOTS OF CANCER

Prof. Mohamed Bayoumi

- Prof of Medical Radiation Physics Clinical Oncology and Nuclear Medicine Dept Faculty of Medicine, Mansoura University (retired).
- Saudi Proton Therapy Centre (SPTC) RSO.
- Coordinator of Medical and Biophysics section in the Arab Physical Society.

SATURDAY, DECEMBER 16, 2023 7 PM CAIRO TIME

Online, Zoom

ArPS Workshops



**The Arab Physical Society Workshop
on Quantum Physics (2022)**



**The Arab Physical Society Workshop
for Physics Teachers (2023)**

ArPS Conferences

The Arab Physical Society and the University of South Valley-Hurgada branch organized the International Conference from 9 October to 11 October 2023 on Laser Physics, Photonics, and Applications



**International Conference on Laser Physics, Photonics,
and Applications**

ArPS Summer School On Advanced Physics



**First ArPS Summer School on
Advanced Physics**


**SECOND ARPS SUMMER SCHOOL
ON ADVANCED PHYSICS**
Zewail City of Science and Technology, August 25 to 29, 2024

Core Courses (Morning Session for All Students):

- Advanced Quantum Mechanics
- Advanced Electromagnetism & Classical Field Theory
- Advanced Statistical Mechanics
- Computational Methods in Physics
- Condensed Matter Physics

Parallel Courses (Specialized Sessions):

- Quantum Field Theory
- General Relativity and Cosmology
- Plasma Physics and its Applications
- Biophysics: From Molecules to Organisms
- Quantum Information and Quantum Computing
- Laser Physics and Applications



For more details
registration

**Second ArPS Summer School on
Advanced Physics (forthcoming)**

Second Summer School on Advanced Physics

- The Arab Physical Society, in partnership with Mansoura University, organized a Summer School on Advanced Physics. The event took place from August 26 to 31, 2023, at Mansoura University.
- The summer school attracted approximately 150 students.



Forthcoming Event: Second Summer School on Advanced Physics

- Second ArPS Summer School on Advanced Physics with Zewail City of Science and Technology, August 25 to 29, 2024
- Approximately 200 students applied for the summer school.

Core Courses (Morning Session for All Students):

- Advanced Quantum Mechanics
- Advanced Electromagnetism & Classical Field Theory
- Advanced Statistical Mechanics
- Computational Methods in Physics

Parallel Courses (Specialized Sessions):

- Quantum Field Theory
- General Relativity and Cosmology
- Plasma Physics and its Applications
- Biophysics: From Molecules to Organisms
- Quantum Information and Quantum Computing
- Laser Physics and Applications
- Condensed Matter Physics



Second Summer School's Team

- Prof. Shabaan Khalil
- Prof. Ahmed Marouf
- Prof. Mahmoud Abd ElHafez
- Prof. Ahmed Younes
- Assoc.Prof. Gaber Faisel
- Assoc.Prof Fareed Abo ElEla
- Prof. Alexy Golovne
- Dr. Mohamed Abass
- Dr. Amr Badro
- Dr. Mohamed Abolmahassen

Meet Our Team in the Second ArPs Summer school On
Advanced Physics at Zewail City of Science and
Technology, August 25 to 29, 2024



Prof. Shabaan Khalil **Prof. Ahmed Marouf** **Prof. Mahmoud Abd Elhafez**



Prof. Ahmed Younes **DR. Mohamed Abass** **Assoc. Prof. Gaber Fesal** **Dr. Yasser Abdou**



Prof. Alexey Golovnev **Dr. Amr Badro** **Dr. Mohamed Abolmahassen** **Assoc. Prof. Fareed Abo ElEla**

Magazine of the ArPS: Trends in Physics

Trends in Physics مسارات في الفيزياء

- Makes specialist knowledge accessible to lay readers in the Arab World
- Explains advanced research in physics, chemistry, mathematics, and engineering in simple terms
- Uses standard Arabic language
- Promotes scientific culture and understanding of nature
- Provides the latest scientific and technological news, innovations, and ideas
- Features interviews with renowned scientists
- Includes useful notes for university students



Team Of the Magazine

**President of
the Boards**



Shabaan Khalil

**Editor-in-
Chief**



Nidal Chamoun

Editorial Board



Shawqi Al Dallal



Sayed Lashin



Adel Awad



Mohsen Zahran



Ahmed Marouf



Ammar Sakaji

Team Of the Magazine

Executive Board



Rawya Ramadan



Eman Taha



Masar Almuttairi



Dana Abdulghani



Rand Al-Far



Reem Berry



Afnan Mohamed

الأبواب الثابتة في المجلة

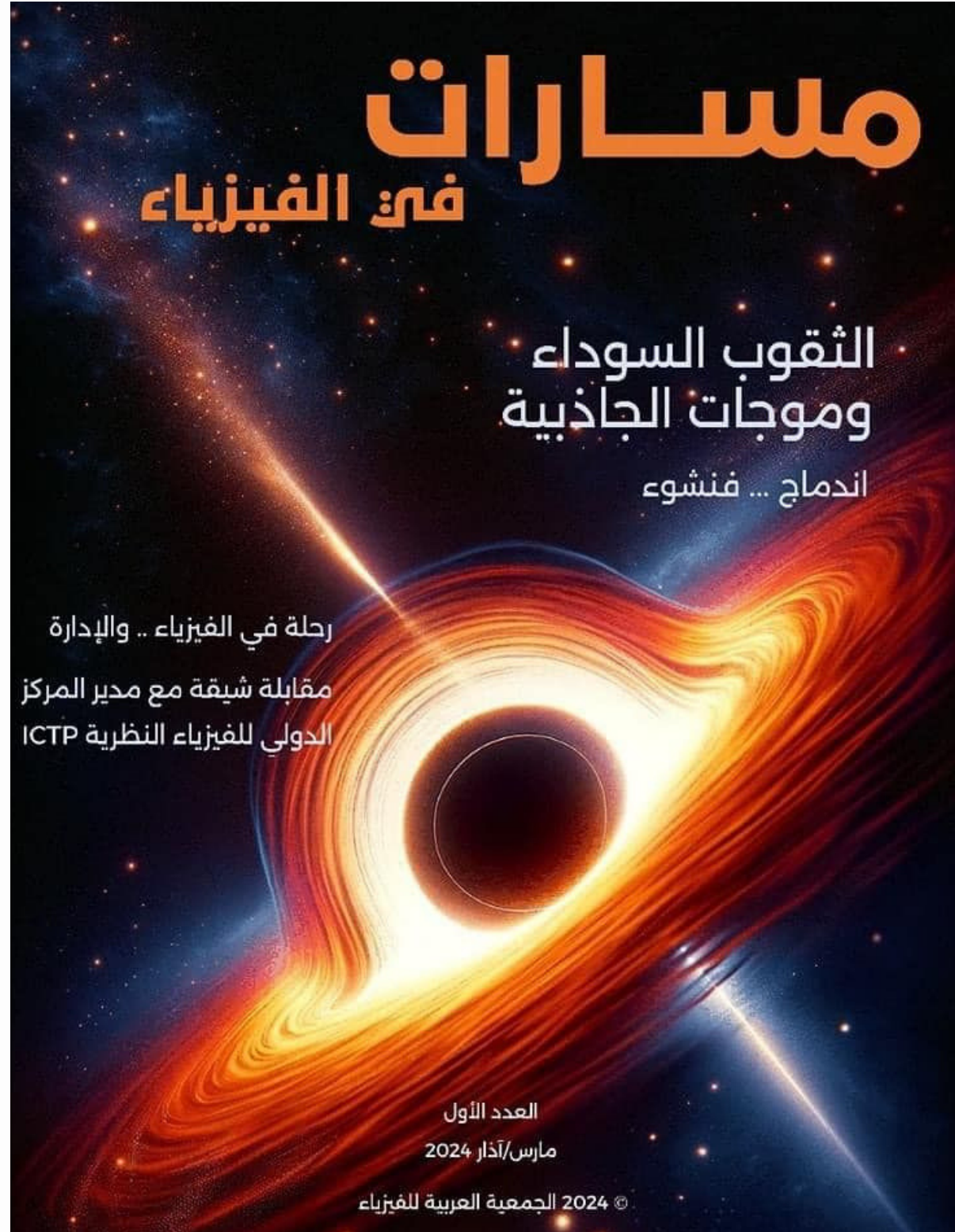


نرحب بأي اقتراحات حول المحتوى، السوية، ...
أمثلة:

باب عن جوائز نوبل والحائزين عليها
تعريف بالعلماء العرب في الماضي والحاضر

- مقالات من بينها مقال الغلاف الرئيسي
- مقابلة مع شخصية علمية مشهورة، مع رابط الفيديو (تُنشر الترجمة العربية في حال تمت المقابلة بلغة أجنبية)
- أخبار علمية حديثة
- معلومات إثرائية وتضم:
- معارف
- مسألة للطلاب
- استعراض لكتاب
- إعلانات (عادة عن نشاط للجمعية)

العدد الاول من مجلة مسارات في الفيزياء



- مقدمة رئيس الجمعية العربية للفيزياء =
- مقدمة رئيس التحرير =
- الثقوب السوداء وموجات الجاذبية
- نظرية الأوتار وما وراءها =
- مفهوم الزمان بين الفلسفة والعلم الحديث
- طاقة الاندماج النووي د. عمرو بدر، د. محمد صوان
- المواد ثنائية الأبعاد وتطبيقاتها: قفزة إلى المستقبل
- رحلة في الفيزياء والادارة : مقابلة مع مدير المركز الدولي للفيزياء النظرية=ICTP
- أخبار ومعلومات إثرائية
- مسألة للطلاب
- استعراضٌ لكتاب ميكانيك الكم الحديث =

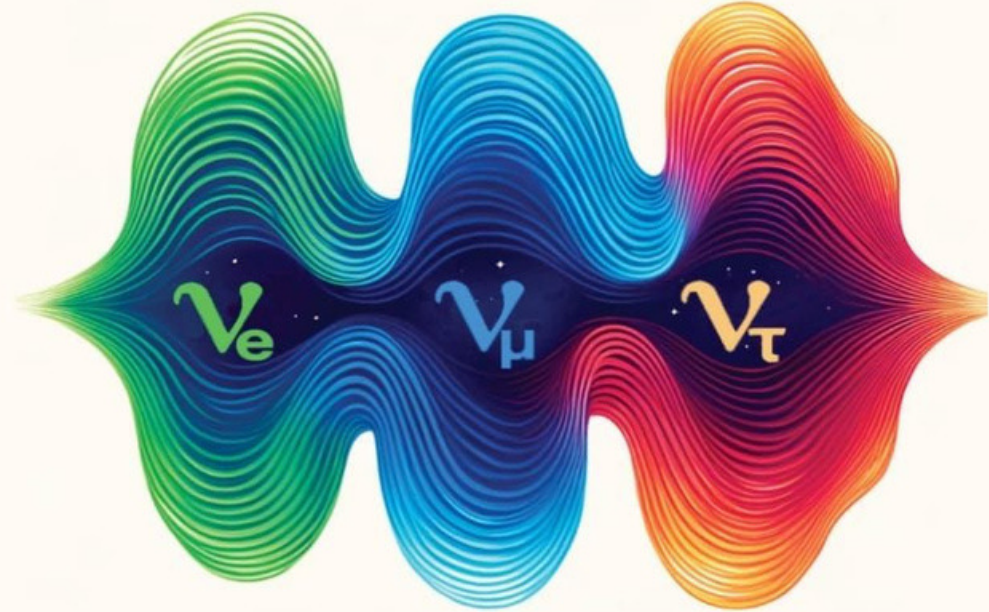
رحلة في الفيزياء والادارة:
مقابلة مع مدير المركز الدولي للفيزياء النظرية ICTP



العدد الثاني من مجلة مسارات في الفيزياء

مسارات في الفيزياء

البحث عن الجسيم الشبح
النيوترينو



من مصر إلى جائزة الـ Breakthrough:
مقابلة مع عالمة المتميزة ماري بيثاي.

العدد الثاني
يونيو/حزيران 2024
© 2024 الجمعية العربية للفيزياء

- مقدمة رئيس التحرير
- النيوترينو: الجسيم الشبح
- الموصليّة الفائقة ومستقبل التقانة
- مقابلة مع الاستاذة ماري بيثاي
- الخلايا الشمسية طاقة المستقبل النظيفة والمستدامة
- الشواش والكسوريات حيث الفيزياء وجاذبها العجيب =
- الضوء الكمومي واختبار أسس ميكانيك الكم =
- كتاب: براد أنشتاين = Fridge =
- كتاب: النظرية المعيارية وفيزياء الجسيمات الاولية
- أخبار علمية وإثرائية
- مسألة للطلاب =
- إعلان: مؤتمر النيوترينو والمادة المظلمة

من مصر الي جائزة WBreakthrough مقابلة مع العالمة المتميزة ماري بيشاي



Join us to the Arab Physical Society

<https://arabphysicalsociety.org/>



Thank you!

The Arab Physical Society (ArPS)

8th African School of Physics, ASP2024
Marrakesh, Morocco
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