



**MEARIM 7 – The 7th Middle East and Africa Regional IAU Meeting**  
*“Advancing Space and Astronomy Sciences for a Sustainable Future”*  
**11–13 November 2025 | Amman, Jordan**

The **7th Middle East and Africa Regional IAU Meeting (MEARIM 7)** was successfully held in **Amman, Jordan**, from **11 to 13 November 2025**. The meeting was **organized under the primary leadership of the Arab Union for Astronomy and Space Sciences (AUASS)**, in close collaboration with the **International Astronomical Union (IAU)**, along with regional academic and scientific institutions. AUASS played a central role in the overall planning, coordination, and implementation of the conference, ensuring its scientific excellence, organizational effectiveness, and broad regional and international engagement.

MEARIM 7 welcomed **196 participants representing more than 30 countries** across the Middle East, Africa, Europe, Asia, and North America, reflecting its broad geographic reach and strong international engagement. Participants included researchers, educators, policymakers, representatives of space agencies, and leaders of scientific institutions. This diverse representation underscored the growing role of the region as an active contributor to the global astronomical community and reinforced the IAU’s mission to promote astronomy as a tool for development, education, and international cooperation.

#### **Scientific Program and Scope**

The scientific program of MEARIM 7 was comprehensive and multidisciplinary, comprising **keynote lectures, parallel scientific sessions, specialized workshops, and poster presentations**. The program addressed both fundamental and applied research topics, aligned with contemporary scientific priorities and the United Nations Sustainable Development Goals. Major thematic areas included:

- **Solar and Space Physics**, with emphasis on solar activity, space weather, plasma dynamics, and heliospheric processes.
- **Stellar, Galactic, and Extragalactic Astrophysics**, including star formation, galaxy evolution, cosmology, and black hole physics.

- **Planetary Science, Exoplanets, and Habitability**, covering solar-system dynamics, near-Earth objects, and the search for life beyond Earth.
- **Space Technology and CubeSat Missions**, highlighting satellite systems, engineering innovation, and hands-on educational platforms.
- **Artificial Intelligence, Data Science, and Big Data**, focusing on modern computational methods in astronomy and space research.
- **Earth Observation, Climate Change, and Sustainability**, demonstrating the application of space-based technologies to environmental monitoring and climate action.
- **Education, Culture, Heritage, and Philosophy of Space**, emphasizing astronomy education, cultural heritage preservation, outreach, and science communication.

Special sessions addressed **space law and policy**, **gender equality in space sciences**, **youth engagement**, and **international institutional cooperation**, reflecting the meeting's holistic approach to scientific advancement and societal impact.

### **Capacity Building and Outreach**

A notable strength of MEARIM 7 was its strong emphasis on **capacity building, education, and knowledge transfer**. Dedicated workshops provided hands-on training in areas such as **radio astronomy data handling, celestial geometry, and scientific publishing**, supporting early-career researchers and students. Sessions on education and outreach highlighted innovative approaches to integrating astronomy and space sciences into national curricula, promoting public engagement, and fostering scientific literacy across the region.

The meeting also underscored the importance of **gender equity and inclusion**, with dedicated discussions on the role of women in astronomy and space research and strategies to enhance their participation at all career stages.

### **Strategic Outcomes and Recommendations**

MEARIM 7 produced a set of forward-looking recommendations aimed at strengthening regional and international collaboration. Key outcomes included calls to:

- Enhance **joint regional research programs and funding mechanisms** linking universities and research centers.
- Establish shared **scientific infrastructure**, including proposals for a regional astronomical observatory and unified digital platforms for data and knowledge sharing.

- Promote **Arabic scientific resources** to support education, outreach, and wider accessibility.
- Develop long-term **regional roadmaps** for space science and technology aligned with national and international strategies.
- Strengthen collaboration between scientists, policymakers, media, and educational institutions to maximize societal impact.

The meeting further endorsed the continuation of regional scientific convenings, including future MEARIM conferences and complementary activities across the Middle East and Africa.

### **Conclusion**

MEARIM 7 successfully fulfilled its objectives by fostering scientific excellence, interdisciplinary dialogue, and international cooperation in astronomy and space sciences. The meeting reaffirmed the region's growing scientific capacity and its commitment to leveraging astronomy as a driver for knowledge, innovation, cultural heritage preservation, and sustainable development. The outcomes of MEARIM 7 are expected to have a lasting impact on regional collaboration and to contribute meaningfully to the global mission of the International Astronomical Union.

**MEARIM 7 (7th Middle-east and Africa Regional IAU Meeting)**  
**“Advancing Space and Astronomy Sciences for a Sustainable  
Future”**

**11–13 November 2025, Amman, Jordan**

Final Scientific Program

الاتحاد العربي لعلوم الفضاء والفلك (AUASS) والجامعة الأردنية  
ينظمان

# MEARIM7

الاجتماع الإقليمي السابع للاتحاد الفلكي الدولي في  
الشرق الأوسط وأفريقيا  
"تطوير علوم الفضاء والفلك نحو مستقبل مستدام"

الجامعة الأردنية - عمان - الأردن

سجل الآن

auass.com

mearim7.auass.com

11-13 نوفمبر/ تشرين الثاني 2025



## General Agenda for the conference

Arab Union for Astronomy and Space Sciences (AUASS)

The International Astronomical Union (IAU)

University of Jordan (JU)

University of Sharjah

The 7th Middle East and Africa Regional IAU Meeting  
(MEARIM7)

"Advancing Space and Astronomy Sciences for a Sustainable  
Future"



# First Day: Tuesday, November 11, 2025

## "University of Jordan Academy Amphitheater"

08:30 – 9:30

### Registration

### Opening Session

Royal Anthem

A recitation from the Holy Qur'an

**Welcome message:** Prof. Mahmoud Al-Jaghoub, Dean of the School of Science-UJ

9:35 – 9:45	Prof. Hamid Al-Naimiy	Director Of Sharjah Academy for Astronomy, Space Science and Technology (SAASST), UAE, President of the Arab Union for Astronomy & Space Sciences.
9:45 – 09:55	Prof. Diana Worrall	Secretary- General the International Astronomical Union (IAU), UK
09:55 – 10:05	Dr. Amr Ezzat Salama	Secretary- General of The Association of Arab Universities (AARU), EGYPT
10:05 – 10:15	Mr. Mohammed Al Harmi	Senior Director, Administrative Affairs Department, will represent H.E. Salem Humaid Al Marri, MBRC, UAE
10:15 – 10:25	Prof. Taha Tawfiq Rabih	President of the National Research Institute of Astronomy and Geophysics (NRIAG).
10:25 – 10:35	Dr. Awni Al-Khasawneh	Secretary- General of The Arab Union for Astronomy & Space Sciences (AUASS), Jordan
10:35 – 10:45	Patronage Of the Conference ( <b>Prof. Nathir Obeidat</b> ) - President of the University of Jordan)	
10:45 – 11:00	<b>Honorary/ Honoring</b>	

11:00 – 11:35

### Group Photo & Coffee break

### Keynote Speakers

Time	Title	Speaker	Chair
11:35 – 11:50	<i>The Uniqueness of Sharjah Academy for Astronomy &amp; Space Sciences Technology (SAASST) and the Arab Union's for Astronomy &amp; Space Sciences (AUASS) Role in Building an Arab Space Ecosystem</i>	<b>Prof. Hamid Al-Naimiy</b> Director of Sharjah Academy for Astronomy, Space Science and Technology (SAASST), UAE, President of the AUASS	<b>Dr. Awni Al-Khasawneh</b>
11:50 – 12:05	<i>Space Law and Non-Space Law on the Non-Peaceful Uses of Outer Space</i>	<b>Ricky J. Lee</b> Executive Director of the International Academy of Space Law and Policy and the Director of Studies and Councillor of the Notaries Society of South Australia	
12:05 – 12:20	<i>Always keeping you in the dark – Opportunities with the Las Cumbres Observatory global telescope network</i>	<b>Martin Dominik</b> Co-Director of the St Andrews Centre for Exoplanet Science.	
12:20 – 12:35	<i>Dark Molecular Clouds and the Formation of Organic Molecules Necessary for the Life's Emergence on Earth</i>	<b>Sohan Jheeta</b> Founder of the Network of Researchers on the Chemical Emergence of Life (NoRCEL), UK STEM Ambassador.	

12:35- 12:50	<i>From Earth to the Stratosphere: Microbial Resilience under Microgravity and Its Implications for Astrobiology</i>	<b>Hanan Issa Malkawi</b> Prof at Yarmouk University - Jordan	
12:50 – 13:05	<i>Earth Observation for a Sustainable Future: The Role of the Bahrain Space Agency</i>	<b>Rasha Al-Amad</b> Representative of the Bahrain Space Agency	
13:05 – 13:20	<i>Qatari calendar: authenticity and achievement</i>	<b>Faisal Al-Ansari</b> Executive Director of the Qatar Calendar House, Qatar	
13:35 – 13:50	<i>CubeSats as Platforms for Experiential Learning and Technological Advancement</i>	<b>Firas Jarar</b> Dean of College of Engineering Technology, Al Hussein Technical University.	
13:50 -14:05	<i>Ad Astra. Why Explore Space?</i>	<b>Jacques ARNOULD</b> adviser to the French Space Agency (CNES)	
14:05 – 14:20	<i>Tracing the enhancement of chemical composition of the Large Magellanic Cloud based on a large sample of observed star clusters</i>	<b>Randa Asad</b> American University of Sharjah	
14:20-14:30	<i>Astronomical Surveys, Catalogs, Big Data and Virtual Observatories</i>	<b>Areg Mickaelian</b> Director of the Byurakan Astrophysical Observatory	

14:30 – 15:30 **Lunch**

## Parallel sessions

**Day 1, Tuesday, Nov 11,2025**  
**The University of Jordan Academy -Hall (B201)**

**Session 1 – Solar and Space Physics I: Solar Activity and Plasma Dynamics**  
**Focus: Solar irradiance, plasma behavior, and space weather.**

<b>Time</b>	<b>Title</b>	<b>Speaker</b>	<b>Chair</b>
15:30 – 15:45	<i>Modulation of Ultraviolet Irradiance by the Solar Activity Cycle</i>	<b>Magda Moheb El Dine</b> National Research Institute of Astronomy & Geophysics.	<b>1- Prof. Riad Manasrah</b> <b>2- Prof. Ahmed Ghita's</b>
15:45 -16:00	<i>Non-equilibrium Entropy Analysis and Distribution Functions in Space Plasma Using Kappa and BBGKY Framework</i>	<b>Manal G.Eldin,</b> Beni-Suef University- Egypt	
16:00 -16:15	<i>Magneto-Inertial Waves and Space Exploration</i>	<b>Yu-Qing LOU</b> Tsinghua University, Physics Department- China	
16:15 -16:30	<i>Multi-spacecraft observations of Stream Interaction Regions (SIR). A cases study</i>	<b>DURAID A. MOHAMMED AL-SHAKARCHI</b> University of Baghdad, Iraq	
16:30 – 16:45	<i>Modeling Solar Magnetic Field Evolution with Physics-Informed Neural Networks and WSO Synoptic Maps</i>	<b>Dr. Mohammed TALAFHA</b> University of Sharjah	
16:45 -17:00	<i>Space Weather during Extremely Disturbed Geomagnetic Conditions and Associated Cosmic Rays Intensity Variation</i>	<b>Subhash Chandra Kaushik</b> Government PMCOE Autonomous College, Datia, Bharat, India	
17:00 – 17:15	<i>Development of the Digital Solar Spectrograph Station in Helwan for Solar Variability Observation</i>	<b>Ahmed Ghita's</b> National Research Institute of Astronomy and Geophysics NRIAG	

17:15 – 17:30	<b>Coffee break</b>		
---------------	---------------------	--	--

<b>Session 2 – Solar and Space Physics II: Magnetic Fields and Interactions</b> Focus: Magnetic and energetic interactions in the heliosphere and beyond.			
--	--	--	--

17:30 – 17:45	<i>The main role of Helium Element in the inverse</i>	<b>Mounib F. El Eid</b> Astronomy, Clemson University, SC, USA-Lebanon	<b>1-Ahmad Massadeh 2-Prof. Gad Al- Qadi</b>
17:45 – 18:00	<i>Space Sciences: Observation and debris hazard mitigation</i>	<b>GAD MOHAMED EL-QADY</b> National Research Institute of Astronomy and Geophysics.	
18:00 – 18:15	<i>Earliest simultaneous multi-color optical observations of GRB 230328B: from 41 seconds to the host-galaxy identification</i>	<b>Toktarkhan Komeshe</b> Nazarbayev University, Kazakhstan	
18:15 -18:30	<i>Developing a New Model to Drive the Internationalization of Industry-University-Institute Collaboration via International Organizations</i>	<b>Jingnong Weng</b> Beihang University, China	
18:30 – 18:45	<i>MORPHOLOGICAL CLASSIFICATION OF WIDE-ANGLE AND NARROW-ANGLE TAILED RADIO SOURCES</i>	<b>Anoud Alzaabi</b> University of Sharjah- SAAST, UAE	
18:45 – 19:00	<i>MEASMA-LEO Observatory – A Low Earth Orbit CubeSat Constellation for Monitoring Atmospheric Constituents in the Vertical Atmospheric Column Using Solar Occultation – Laser Heterodyne Spectroscopy Payload</i>	<b>Omar Al-Emam,</b> INTOSPASS - International Outer Space Association Ltd	
19:00 – 19:15	<i>From Big Data to Big Impact: An African Perspective</i>	<b>Sally Macfarlane</b> Inter-University Institute for Data-Intensive Astronomy	

<b>The University of Jordan Academy -Hall (B202)</b>			
--	--	--	--

<b>Session 3 – Star Formation and Interstellar Medium</b> Focus: Stellar birth, molecular clouds, and interstellar processes.			
--	--	--	--

Time	Title	Speaker	Chair
15:30 – 15:45	<i>The evolution of the binary fraction in star clusters</i>	<b>Priya Shah</b> Maulana Azad National Urdu University, Hyderabad, India	<b>1- Prof. Osama Shalabia 2- Dr. Alaa al- Azzam</b>
15:45 -16:00	<i>The spectrophotometric stellar parameters of nearby stellar system: HIP 32132 based on Gaia Observations</i>	<b>Suhail Masda</b> Department of Physics, Mahrah University, Mahrah, Yemen	
16:00 -16:15	<i>Resolving Double-Lined Binaries: From One Visual Epoch to 3D Orbits and Masses</i>	<b>Alaa Faisal Al Rawashdeh</b> Department of Physics, Al-Hussein Bin Talal University, Ma'an, Jordan	
16:15 -16:30	<i>IRAM Class I Methanol Masers toward Massive Protostellar Objects in the Cygnus-X Molecular Cloud</i>	<b>Mohamed Said Darwish</b> National Research Institute of Astronomy and Geophysics.	
16:30 – 16:45	<i>Investigation of the protoplanetary disk around one of the Herbig stars.</i>	<b>Anas Salman Taha</b> University of Baghdad,Iraq	
16:45 -17:00	<i>Gas Sloshing in the Core of Galaxy Cluster: Insights from Chandra and GMRT Observations</i>	<b>Satish Sonkamble</b> North-West University, Potchefstroom, South Africa	
17:00 – 17:15	<i>Probing the Nature of Infrared-Bright Dust-Obscured Galaxies at Cosmic Noon.</i>	<b>Nofoz Suleiman</b>	
17:15 – 17:30	<b>Coffee break</b>		

## Session 4 – Planetary Science and Solar System Studies I

Focus: Planetary systems, impacts, and solar system dynamics.

17:30 – 17:45	<i>Exploring the Frontiers of Planetary Science: Origins, Worlds and Life</i>	<b>Naceur Bouziani</b> Astrophysics & Astronomy Division at the Center of Research in Astronomy Astrophysics & Geophysics (CRAAG)	1- Prof. Osama Al-Khawaja 2- Mohammad Mardini
17:45 – 18:00	<i>Exploring the Interplay between Gamma-Ray Bursts and Gravitational Waves</i>	<b>Shawqi Dallal</b> Ahlia University, Bahrain	
18:00 – 18:15	<i>Does the Gravitational Influence from a Lineup of Planets Strong Enough to Cause a Deformation of Earth?</i>	<b>Hadia Hassan Ibrahim Selim</b> National Research Institute of Astronomy and Geophysics.	
18:15 -18:30	<i>Discovery and description of open superclusters</i>	<b>Yasser Hendy</b> National Research Institute of Astronomy and Geophysics.	
18:30 -18:45	<i>Status of the first mm-wave radio telescope in Africa – the Africa Millimeter Telescope</i>	<b>Michael Backes</b> University of Namibia	
18:45 – 19:00	<i>Collaborative Russian-Tajik observation of small bodies of the Solar system</i>	<b>Kartashova Anna</b> Institute of Astronomy of Russian Academy of Sciences	
19:00 – 19:15	<i>Photogrammetric and GIS Analysis of Major Volcanoes in the Elysium Region, Mars</i>	<b>Yara Salim Al-Tounji</b> Syrian Astronomical Association, Syria	

### Parallel sessions

Day 2, Nov 12, 2025

the University of Jordan Academy -Hall (B201)

## Session 5– Galaxies, Cosmology, and Black Holes

Focus: Galaxy evolution, cosmological structures, and stellar variability.

Time	Title	Speaker	Chair
09:00 – 09:15	<i>An In-Depth Analysis of the Variations in Radius and Temperature of the Cepheid Variable RS Puppis</i>	<b>Mashhoor Alwardat</b> University of Sharjah- SAAST, UAE	1-Prof. Bashar Lahlouh 2-Prof. Naceur Bouziani
09:15 -09:30	<i>Beyond Mass: Disentangling the Evolution of Brightest Cluster Galaxies and Dwarf Galaxies</i>	<b>Ashraf A. Shaker</b> Astronomy Department, National Research Institute of Astronomy and Geophysics	
09:30 – 09:45	<i>The Formation and Evolution of Supermassive Black Holes through Cosmic History</i>	<b>Luis C. Ho</b> Kavli Institute for Astronomy and Astrophysics, Peking University, China	
09:45 -10:00	<i>A Comprehensive Catalog of Long-Period Variables in M33: Tracing Stellar Evolution and Galaxy Formation in the Local Group</i>	<b>Mina Alizadeh</b> University of Zanjan and School of Astronomy, Iran	
10:00- 10:15	<i>Integrated Orbital and Physical Analysis of Spectro-Visual Binaries for Habitability and Stability Modeling</i>	<b>Ahmad Ali Abushattal</b> Al-Hussein Bin Talal University, Ma'an, Jordan	
10:15-10:30	<i>High-Fidelity Optical Modeling of CubeSat Solar Cells</i>	<b>Bilal Algnamat</b> Hussein Bin Talal University	

10:30 – 10:45	<b>Structure and Stability of Compact Stars under Conformable Fractional Relativistic Polytrope</b>	<b>Mohamed Nouh</b> National Research Institute of Astronomy and Geophysics, Egypt	
10:45-11:00	<b>Age Estimation of Star Clusters through CCD Photometry at the Sharjah Astronomical Observatory</b>	<b>Mohammad F. Talafha</b> University of Sharjah- SAAST, UAE	
11:00 -11:15	<b>Coffee break</b>		
<b>Session 6 – Exoplanets and Habitability</b> Focus: Binary systems, exoplanet dynamics, and habitability modeling.			
11:15-11:30	<b>Geophysical Characteristics of the Yarmouk River and Their Impact on Tectonic Movements in the Jordan Valley Basin</b>	<b>Ahmad Alshraideh</b> chairman of Development Association for Humans and Environment- Jordan	
11:30 -11:45	<b>Seawater inundation monitoring and early warning technology based on multi-source data fusion driven by both physical and digital elements</b>	<b>Dongkai Yang</b> Beihang University, China	1-Prof. Ashraf Shaker 2-Prof. Luis C. Ho
11:45 – 12:00	<b>Precise Masses and Model-Based Stability &amp; Habitability in Solar-Type (G-Type) SB1 Binaries</b>	<b>Mahmoud Alnaimat</b> Department of Physics, Al-Hussein Bin Talal University	
12:00 -12:15	<b>Stellar abundances of NGC 419 using Machine Learning methods – a pioneer approach in the Small Magellanic Cloud (SMC) galaxy.</b>	<b>Asad Mustafa,</b> The College of Wooster, Ohio, USA	
12:15 -12:30	<b>Computational Modeling of Optical Resolution and Angular Separation in Binary Stars</b>	<b>Hatem Alameryeen</b> Al-Hussein Bin Talal University	
12:30 – 12:45	<b>Space Biology and Microbiology: How Life Adapts Beyond Earth</b>	<b>Hebat-Allah Abdel-Haleem</b> Faculty of Navigation Science and Space Technology, Beni-Suef University	
12:45 – 13:00	<b>Digital Transformation and Sustainable Knowledge Management: The Future of Space Science Research</b>	<b>Taghreed Alkadahat</b> Arab Union for Astronomy and Space Sciences	
<b>Session 7– Space Technology and CubeSat Missions</b> Focus: Satellite systems, engineering, and design optimization.			
14:00 – 14:15	<b>Design and Control of Satellite Electrical Power Subsystems Operated by Metaheuristic Based MPPT Algorithms</b>	<b>Shaikha AlMulla</b> University of Sharjah- SAAST, UAE	1-Prof. Khaled Youssef Kamel 2-Prof. Ali Taani
14:15 -14:30	<b>LEO-Satellite-Enabled Autonomous AI Robots for Resilient In-Situ underground Pipeline Inspection</b>	<b>Khaled Youssef Kamel</b> Beni-Suef University	
14:30 – 14:45	<b>The Latest progress of Laser Timer Transfer with Chinese Space Station</b>	<b>Zhang Zhongping</b> Beihang University, China	
14:45 -15:00	<b>Research and application on satellite laser ranging at Ultra-high repetition rate</b>	<b>Li Pu</b> Beihang University, China	
15:00 – 15:15	<b>BeiDou Navigation Satellite System and Its Applications in Developing Countries</b>	<b>Tian Jin</b> Beihang University ,China	
15:15 – 15:30	<b>Monitoring The Universe Using a Low-Budget Radio Observatory</b>	<b>Mohammad Rihan</b> University of Sharjah- SAAST, UAE	

15:30 – 15:45	<i>Temple of the Sun: Further Investigation of the Summer Solstice at the Saar Temple in Bahrain</i>	<b>Myriam Alqassab</b> Bahrain Stargazers Astronomy Club, Bahrain	
15:45 – 16:00	<i>Design of a Star Camera for Celestial Navigation Using Blob Image Processing. (Online)</i>	<b>Yasser Asrul Ahmad</b> Department of Electrical and Computer Engineering Kulliyah of Engineering, Malaysia	

16:00- 16:15	<b>Coffee break</b>		
--------------	---------------------	--	--

<b>Session 8– International Cooperation, Policy, and Institutions</b> Focus: Global collaboration, policy frameworks, and institutional development			
--	--	--	--

16:15 – 16:30	<i>International Cooperation of Women Scientists as a Precondition for Gender Equality in Space Research - Tajikistan Case Study</i>	<b>Kokhirova Gulchehra</b> National Academy of Sciences of Tajikistan	1- Prof. Hassan Darhmaoui  2- Prof. Priya Shah
16:30 - 16:45	<i>International Space Law: Regulatory Challenges in the Era of Communications and Satellites</i>	<b>Hassan ABOUSEADA</b> Egyptian Space Agency, Egypt	
16:45 – 17:00	<i>Building Jordan as a Regional Hub for Astronomy and Space Sciences: Research ,Education, and International Collaborations through AASTG</i>	<b>Ala'a A A Azzam</b> University of Jordan	
17:00 – 17:15	<i>BRICS Astronomy and the Social Impact Programmes</i>	<b>Duduzile Kubheka</b> BRICS Astronomy, South Africa	
17:15- 17:30	<i>The BRICS Intelligent Telescope and Data Network: a flagship programme</i>	<b>David A.H. Buckley</b> South African Astronomical Observatory	
17:30 – 17:45	<i>UN-PSA: Building Capacity Through the UN Regional Centres and Global Collaboration</i>	<b>Yizhuo Cui</b> North China University of Technology; Beihang University	
17:45 -18:00	<i>Navigating the Final Frontier: A Comprehensive Framework for International Regulations and Standards in Deep Space Activities</i>	<b>A.J. Surin</b> VisionGen Group, Malaysia	
18:00 - 18:15	<i>Recent activities of the IAU South West and Central Asian Regional Office</i>	<b>Ani Davatyan</b> Byurakan Astrophysical Observatory (BAO)	
18:15 – 18:30	<i>Uncovering the Meteorite Record of Southern Jordan: A Field-to-Laboratory Classification Approach</i>	<b>Mou'ad Ahmad Tarawneh</b> Al-Hussein Bin Talal University	
18:30 – 18:45	<i>Atmospheric Site Evaluation for Astronomical Observatories in the MENA Region: Focus on the Arabian Peninsula</i>	<b>Zouhair Benkhaldoun</b> University of Sharjah- SAAST, UAE	
18:45 – 19:00	<i>Astrophysical Research in Kazakhstan</i>	<b>Chingis Omarov, Maxim Krugov</b> Fesenkov Astrophysical Institute , Kazakhstan	

<b>Day 2, Nov 12,2025</b> the University of Jordan Academy -Hall (B202)			
--	--	--	--

<b>Session 9– Planetary Science II: Asteroids and Lunar Studies</b> Focus: Near-Earth objects, lunar missions, and observational research.			
---	--	--	--

<b>Time</b>	<b>Title</b>	<b>Speaker</b>	<b>Chair</b>
-------------	--------------	----------------	--------------

09:00 – 09:15	<i>Spatial Distribution and Classification of Meteorites and Their Spatial Distribution In Algerian</i>	<b>Belhai Djelloul</b> Algeria	<b>1-Prof. Mashhoor Alwardat</b> <b>2-Dr. Ahmad Abo Shattal</b>
09:15 -09-30	<i>A 2020 Lunar Impact Event Observed by the Sharjah Lunar Impact Observatory (SLIO)</i>	<b>Mohammad F. Talafha</b> University of Sharjah- SAASST, UAE	
09:30 – 09:45	<i>Comprehensive Guides to Meteorite Recognition: Field Criteria, and Laboratory Techniques</i>	<b>Mohamed Th. S. Heikal</b> Geology Department, Faculty of Science, Tanta University	
09:45 -10:00	<i>High-Efficiency Solar Cells for CubeSat and Nanosatellite Power</i>	<b>Layla Al Shehhi</b> Univirsity of Sharjah	
10:00- 10:15	<i>Public Engagement Initiatives during the 2024–2025 Academic Year by the SAASST Astronomical Observatories Department</i>	<b>Ammar Abdulla</b> University of Sharjah- SAASST, UAE	
10:15-10:30	<i>The Role of the International Astronomical Center in Promoting Astronomical Science and Culture in the Region</i>	<b>Mohammad Odeh</b> International Astronomical Center (IAC)	
10:30 – 10:45	<i>A Comprehensive Overview of the CubeSat Laboratory at SAASST: Achievements in CubeSat Development, Payloads, and Lunar Science</i>	<b>Yousuf Faroukh</b> Univirsity of Sharjah	
10:45 – 11:00	<i>Moroccan Meteorites and the Role of the University Museum</i>	<b>Abderrahmane Ibhi</b> Ibn Zohr University, Morocco.	
11:00 -11:15	<i>Observing Near-Earth Asteroids at Sharjah Optical Observatory</i>	<b>Fatima Alkhateri</b> Univirsity of Sharjah	
11:15 – 11:30	<b>Coffee break</b>		
<b>Session 10 – Artificial Intelligence, Data Science, and Innovation</b> Focus: AI, simulation, and big data in astronomy.			
11:30 – 11:45	<i>Defining Agricultural Holdings in the Najd Region of Dhofar Governorate, Sultanate of Oman: An Integrated GeoAI, GIS, and Remote Sensing Approach</i>	<b>Maria Albaloooshi, Ahmad alhatmi (Oman)</b>	<b>1- Prof. Sattam Shqoor</b> <b>2-Dr. Hanna SABAT</b>
11:45 -12:00	<i>Deep Learning-Based Ground-Level Cloud Classification for Astronomical Observation Support</i>	<b>Burçak Yeşilırmak Taşkın</b> Atatürk University, Turkey	
12:00 -12:15	<i>Empowering Generation Z Through Space Education: A STEAM Model implemented in Greece</i>	<b>MARGARITA METAXA</b> IAU/NOC for Greece, Arsakeio School National Observatory of Athens	
12:15 – 12:30	<i>Multiwavelength Search and Studies of Active Galaxies and Their Fine Classification</i>	<b>Areg Mickaelian</b> Byurakan Astrophysical Observatory (BAO)	
12:30 – 12:45	<i>International cooperation in robotic telescopes for research education</i>	<b>Michael Thomas Fitzgerald</b> Deakin University, Australia	
12:45 – 13:00	<i>Ai in Developing Space Educational Simulators</i>	<b>Marwan Al-Shwaiki</b> University of Sharjah- SAASST, UAE	
13:00 – 14:00	<b>Lunch</b>		
<b>Session 11– Earth Observation, Climate, and Sustainability</b> Focus: Earth observation for climate action and sustainable development.			

14:00 – 14:15	<i>A GeoAI Framework for Proactive Rangeland Management in Jordan: A Data-Driven Approach for Sustainable Land Stewardship</i>	<b>Haifa Almohammad</b> Jordan,	1- Prof. Ahmad Ghadhah  2-Dr. Muhammad Al-Assiri
14:15 -14:30	<i>Remote Sensing-Based Evaluation of Drought Dimensions in Yarmouk River Basin for Water and Agriculture Management</i>	<b>Khaled Hazaymeh</b> Yarmouk University, Jordan	
14:30 – 14:45	<i>Assessing the Impact of Land use/ Land Cover Change on Land Surface Temperature in the Eastern Mediterranean Syria, Lebanon, and Palestine</i>	<b>Ahmed Ghodieh</b> An-Najah National University, Palestine	
14:45 -15:00	<i>Modeling Coastal Floods in Libya Using Machine Learning and Google Earth Engine</i>	<b>Mubaraka Saad Alghariani</b> University of Tripoli, Libya	
15:00 – 15:15	<i>Monitoring Coastal Ecosystem Change in the Mediterranean: A Proxy-Based Assessment of Good Environmental Status (GES)</i>	<b>Ghaleb Faour</b> Director, National Center for Remote Sensing, Lebanon	
15:15 – 15:30	<i>Ethiopia’s Living Carbon Map: Real-Time Forest Carbon Intelligence Driving Climate Action (Online)</i>	<b>Shimeles Tadesse Zelelew</b> Space Science and Geospatial Institute (SSGI), Ethiopia	
15:30 – 15:45	<i>Digital Documentation of Architectural Heritage Using Photogrammetry – Case Study: Al-Azm Palace in Damascus</i>	<b>Yara Alwish</b> Damascus University, Syria	
15:45 – 16:00	<i>The Contrasting Impact of Greenhouse Gases on Climate And Health In Damascus And Hasaka: A Comparative Study Using Structural Equation Modeling</i>	<b>Rahaf Al Rawas</b> Syria	

**Coffee break**

**Session 12– Philosophy and the Future of Space Exploration**  
Focus: Humanistic, ethical, and visionary perspectives in astronomy

16:15- 16:30	<i>APSCO: Towards a Sustainable Future in Advanced Space and Astronomy Sciences</i>	<b>Li Gaofeng – APSCO- China</b>	1- Saleh S H Al Shidhani 2-Prof. Mubaraka Saad Alghariani
16:30 – 16:45	<i>The Effect of Using VR Technology in Developing Imaginative Thinking Skills Among Fourth-Grade Primary School Students Regarding Solar System Vocabulary in Science</i>	<b>Hasan Sabbar Allwan – Iraq</b>	
16:45 – 17:00	<i>Geographical Names and Cultural Identity in Bahrain: A Geospatial Perspective on Arab-Islamic Heritage in Astronomy</i>	<b>Khalid Al Hammadi, Bahrain</b>	
17:00- 17:15	<i>The Nomenclature of Extraterrestrial Objects: Stakes, Processes, and the Place of Arab-Muslim Culture</i>	<b>Brahim Atoui</b>	
17:15 – 17:30	<i>The Qatari Experience in Promoting Astronomical Culture</i>	<b>Prof. Beshir Marzouk,</b> Qatar Calendar House	
17:30 -17:45	<i>Designing an Interactive Gallery for Islamic Astronomy: An Experiential Learning Approach at Kompleks Falak Al-Khawarizmi (Online)</i>	<b>Radzuan Bin Nourdin &amp; Nazreen Bin Abdullasim</b> University Technical, Malaysia.	
17:45 -18:00	<i>Enhancing International Collaboration within Big History: Integrating Cosmological Processes within the Wider Context of General Evolution (Online)</i>	<b>David LePoire</b> Russian Academy of Sciences (AK)	
18:00 - 18:15	<i>The Future Frontiers of Space Technology</i>	<b>Mohamad alassiry , AUASS</b>	
18:15 - 18:30	<i>Unlocking Black Hole Populations in the Era of Big Data: A Synthesis of Latest Archives and AI-Driven Methodologies for Galactic and Extragalactic Surveys</i>	<b>Saleh S H Al Shidhani, AUASS</b>	
18:30 - 18:45	<i>Successful Observation Campaign of Stellar Occultation by Near-Earth Asteroid (2212) Hephaistos in southern Algeria</i>	<b>BABA AISSA Djounai,</b> Center of Research in Astronomy, Astrophysics and Geophysics (ex Algiers Observatory)	

18:45 – 19:00	<i>Teaching Astronomy and Space Sciences in Schools and Universities for a Sustainable Future</i>	Saleh Naser Faculty of Sciences of Monastir, Tunisia	
---------------	---	--	--

**Day 2, Nov 12,2025**  
**the University of Jordan Academy - Hall (B203)**

**WORKSHOPS**

09:00 – 11:00	<i>Single-Dish Radio Telescope Data Handling Workshop</i> <i>James Okwe Chibueze</i> <b>Information about the workshop</b> 1. Duration: The workshop will last a total of 3 hours, covering a short lecture on single-dish radio observation and hands-on data processing. 2. Participant would need to have Anaconda ( <a href="https://www.anaconda.com">https://www.anaconda.com</a> ) installed in their computers for the hands-on session. 3. Linux OS would be preferred but Anaconda installation on Windows PC will also be possible. 4. Academic background: Students and researchers who have interest in radio astronomy should attend.		
11:00- 13:00	<i>Celestial Geometry – The Mathematical Foundations of Arabic/Islamic Astronomical Instruments and Astrolabes</i> <i>Osama Fathi - Egyptian Society for Astronomy</i>		
14:00 15:00	<i>Strengthening Bricks Collaborations in Astronomy: Deepening Engagement with New Member Countries</i> <i>Duduzile Kubheka, David A.H. Buckley,</i>		

**Day 3, Nov 13,2025**  
**Hall (Physics Department meeting room) -**

**WORKSHOPS**

11:00 - 12:00	<i>IEEE AESS Jordan Chapter Insights &amp; Networking Session</i>		
---------------	---	--	--

**Day 3, Nov 13,2025**  
**(Wasfi AL-Tall amphitheater)**

**Session 13– Education, Culture, and Heritage I**

**Focus:** Astronomy education, cultural heritage, outreach, and the philosophy of space exploration

Time	Title	Speaker	Chair
09:00 – 09:15	<i>Star Formation in the Galactic Center's Inner Parsecs</i>	<i>Nadeen B. Sabha</i> University of Innsbruck	1-Dr. Walaa Al-Tamimi  2-Dr. Mohammad Talafha
09:15 -09-30	<i>The Astrolabe of Ibn al-Shatir and al-Tantawi: An Analytical Study and Future Recommendations</i>	<i>Mohammad Awad Aljady</i> University of Hertfordshire, Syria	
09:30 – 09:45	<i>The Impact of the Planetarium on the Astronomical Awareness of Civil Society in Amman</i>	<i>Dalal Al-Lala</i> AUASS, Jordan	
09:45 -10:00	<i>The Role of Astronomy in Arab-Islamic Heritage: Astronomical Instruments as a Model for Knowledge Transfer and Their Potential Integration into Sustainable Development</i>	<b>OSAMA FATHI WAHBA</b> Egyptian Society for Astronomy	

10:00- 10:15	<b><i>Astronomy as a Catalyst for Inspiring STEAM Education: Examples and Applications</i></b>	<b>Hassane DARHMAOUI</b> School of Science and Engineering, Morocco	
10:15-10:30	<b><i>Astronomy Education in Ancient Morocco: The Case of Al-Qarawiyyin University</i></b>	<b>Talibi AlHassan</b> Al-Tariq Meteorite Foundation, Morocco	
10:30 – 10:45	<b><i>Empowering Women Through the Stars</i></b>	<b>Arash Danesh</b> Institute for research in fundamental sciences, Iran	
10:45 -11:00	<b>Coffee break</b>		
11:00 – 11:15	<b><i>Science Communication and the Rise of Amateur Astronomy in Iran over the Past Three Decades</i></b>	<b>Mohammad Javad Torabi</b> Co-National Outreach Coordinator of Iran	<b>1-Prof. Shawqi Al-dalal 2- Dr. Suhail Massda</b>
11:15 – 11:30	<b><i>Shared Skies, Shared Words: Connecting Arabian and Ethiopian Astronomy through Planetary Nomenclature and Popularization</i></b>	<b>Lealem Kinfel Alula</b> Addis Ababa University, Ethiopia	
11:30 – 11:45	<b><i>International Activities of the Byurakan Astrophysical Observatory</i></b>	<b>Areg Mickaelian</b> Byurakan Astrophysical Observatory	
11:45 – 12:00	<b><i>The Impact of Light Pollution on the Potential for Developing Astronomical Tourism in Iraq: A Field Study Using the Sky Quality Meter (SQM)</i></b>	<b>Najah Al-Salhi</b> An activist in dark-sky awareness, light pollution prevention, and astro-tourism	
12:00- 12:15	<b><i>Can space technologies play a role in controlling invasive species to secure our ecosystems? (Online)</i></b>	<b>Wafaa Amer</b> Faculty of Science, Cairo University	
12:15-12:30	<b><i>A Decade of Inspiring Young Minds: The Qatar School Astronomy Olympiad and Its Role in Promoting Space Science.</i></b>	<b>Hani Dalee</b> Arab Union for Astronomy & Space Sciences	
12:30 – 12:45	<b><i>The Importance of Preserving and Authenticating the Arab Astronomical Heritage</i></b>	<b>Ibrahim Jarwan</b> Emirates Astronomy Society	
12:45 – 13:00	<b><i>Astronomy Education Research: Achievements, Challenges, and Future Prospects in Jordan</i></b>	<b>Raja' Mu'taz Hasan</b> Al-Hussein Bin Talal University	
13:00 – 14:00	<b>Lunch</b>		
14:00 – 14:15	<b><i>How to get published in Nature?</i></b>	<b>May Chiao</b> Senior Consulting Editor Nature Reviews Physics	<b>1. Khalid Albdour 2. Zouhair Benkhaldoun</b>
14:15 -14:30	<b><i>Interactive webtool for analyzing integrated spectra</i></b>	<b>Randa Ased</b> American University of Sharjah	
14:30-14:45	<b><i>The emergence of life and the universality of biology</i></b>	<b>Martin Dominik</b> University of St Andrews, United Kingdom	
14:45 -15:00	<b><i>Space technology in Jordan: reality and ambitious</i></b>	<b>Qays Omari</b>	
15:00-15:15	<b><i>High sensitivity census of HII regions in Milky Way using MeerKAT</i></b>	<b>James Okwe Chibueze,</b> University of South Africa	
15:15-15:30	<b><i>Scientific Mentorship for Iraqi Youth: Methods and Impact on Amateur Astronomy</i></b>	<b>Jawad Al-Enezi</b> President, Iraqi Association of Science Enthusiasts and Gifted Youth.	
15:30 – 15:45	<b><i>Numerical Study of a Vortex Coronagraph with IAH Apodization for EAC2-Type Segmented Apertures</i></b>	<b>Zouhair Benkhaldoun</b> University of Sharjah- SAAST, UAE	
15:45 -16:00	<b><i>Star Formation in the Perseus Molecular Cloud: IC 348, NGC 1333 and Friends</i></b>	<b>Priya Shah</b> Maulana Azad National Urdu University, Hyderabad, India	

16:00 – 16:15	<i>Leveraging Astro tourism for Development: Opportunities for the Arab Region (Online)</i>	Joyful Elma Mdhli, IAU Office of Astronomy for Development	
16:15 – 16:30	<b>Coffee break</b>		
<b>Session 14– Closing Session</b>			
16:30– 17:30	Conclusions & Recommendations		
<b>Day 4, Nov 14,2025</b>			
<b>Excursion to Petra – The Rose-Red City of Wonders (Optional)</b>			
<b>POSTERS</b>			
<b>Women And Astronomy: Bridges To the Future</b>	Turkia Jabour - Syrian Astronomical Association		
<b>Chemistry and the universe</b>	Abdulaziz Snoubar- Syrian Astronomical Association		
<b>Astrobiology and the search for our place in the universe</b>	Nirmeen Choufi- Syrian Astronomical Association		
<b>Astrometric and Photometric Study of the Visual Binary System WDS 21055+6210 (STF 2764)</b>	Hussam Atallah Aljboor- Al Balqa Applied University, Amman, Jordan		
<b>The Nabataeans Scientific project of petra</b>	Mamoun Al Nawafleh		
<b>Astro- tourism in Petra</b>	Rabab Basim Al-Qudah		
<b>Public Astronomy at the City of Sciences in Tunis</b>	Hisham bin yhia		
<b>How are astronomy camps organized in Iraq?</b>	Jawad Al-Enezi - President of the Iraqi Amateur Astronomers Association		
<b>Beyond The Past: The Stars as a Compass for a Peaceful and Sustainable Future</b>	Jean-Pierre Saghbini-National Astronomy Education Coordinator - OAE-IAU , Lebanon		
<b>From Order to Chaos in a Non-Hermitian Bose–Einstein Condensate: Insights for Astrophysical Systems- JORDAN</b>	1- Roger R. Sakhe 2- Asaad R. Sakhel		
<b>Artificial Intelligence in Space Exploration: Advancing Autonomous, Robotics for Navigation and Landing in Extreme Environments - Jordan</b>	Mohamad abu Amsha		
<b>SADA - Space Al Debris Analyzer, Jordan</b>	Owais Abusonaina		
<b>Activities of the Ibn Al-Haytham Association for Science and Astronomy - Algeria</b>	Zain Uddin Zerwal		
<b>Arab Union for Astronomy and space Sciences- Jordan</b>	Diala Taneenah		
<b>Jordanian Meteor and Meteorite Association</b>	Motasem Alslihat		
<b>Life and Cosmic Intelligence: A New Perspective on Intelligent Life in the Universe</b>	IMAD MONIR ASSADI		
<b>Building Peace and Cultural Exchange through Astronomy Outreach: Lessons from Libya's First Space Camp and the Celestial Sands AstroCamp</b>	Amjed Khrwat - (Libya)		
<b>Automated Detection of X-Ray Transients in Archival Light Curves Using Statistical Change-Point Analysis</b>	1-Leen Rayyan 2- Retal Nasrallah		
<b>From Observations to Cosmology: Galaxy Clusters as Probes of Structure Growth and Dark Energy</b>	Arwa Abdulghafour University of Sussex, UK		

**MEARIM 7 (7th Middle-east and Africa Regional IAU Meeting)**  
**“Advancing Space and Astronomy Sciences for a Sustainable  
Future”**

**11–13 November 2025, Amman, Jordan**

**Scientific Highlights of the Meeting**

## Overview and participation

MIRAM 7 brought together the regional and international astronomy and space-science community for scientific exchange and strategic coordination. The recommendations document reports **more than 195 participants representing 36 countries**, indicating broad geographic reach and strong potential for sustained cross-border research collaboration.

## Strategic scientific outcomes and recommendations

### 1) **Regional research collaboration and funding mechanisms**

A core outcome was the call to enhance **joint Arab scientific research** in astronomy and space sciences through formal **funding and cooperation programs** linking universities and research centers. This is intended to improve the scale of collaborative projects and strengthen long-term research networks across the region.

### 2) **Infrastructure and regional scientific capabilities**

The recommendations propose establishing a **joint Arab astronomical observatory** equipped with advanced technologies to serve as a regional center for **research, training, and scientific tourism**. This reflects a shared priority to strengthen observational capability and build a lasting scientific asset that supports both research productivity and scientific capacity building.

### 3) **Data, knowledge sharing, and Arabic scientific resources**

To support scalable research and education, MIRAM 7 recommends creating a **unified Arabic digital platform** (under the Arab Union's supervision) that includes **astronomical databases, scientific publications, event listings, and Arabic educational resources**. This would enhance regional access to data and literature, improve visibility of scientific outputs, and provide structured educational materials in Arabic.

### 4) **Education and capacity building**

MIRAM 7 emphasizes integrating space and astronomy into national curricula via **interactive learning tools**, and strengthening student engagement through camps and extracurricular science programs. It also encourages youth participation in international competitions and space-related programs, supported by the development of incubators and specialized training centers to build workforce readiness in astronomy and space sciences.

### 5) **Public communication and societal impact**

The recommendations prioritize collaboration with Arab media to promote astronomy culture and counter misinformation and superstition through simplified, engaging scientific content. These actions are positioned as essential for building public trust in science and strengthening the science–society interface.

## 6) Excellence, recognition, and long-term direction

The meeting recommends launching an **annual Arab award** for outstanding scientific achievements in astronomy and space sciences to recognize researchers and pioneering initiatives. It also calls for developing a **joint Arab roadmap** for space technology development and **deep-space exploration**, aligned with national strategies—framing a long-term, coordinated approach to regional progress in space capabilities.

## Continuity and future events

The recommendations document endorses continued regional and Arab scientific convenings, including:

- The **General Conference of the Arab Union for Astronomy and Space Sciences** to be hosted in **Egypt (August 2027)** in conjunction with the **total solar eclipse**, with **Tunisia** as an alternative location if needed, and thanks the **National Research Institute of Astronomy and Geophysics (NRIAG)** for readiness to host.
- Following a **High Council meeting of the Arab Union for Astronomy and Space Sciences (AUASS)**, chaired by Prof. Hamid M. K. Al-Naimiy, President of AUASS, and Dr. Eng. Awni Mohammed Al-Khasawneh, Secretary General of AUASS, and attended by all members of the Council — including Prof. Ashraf Shaker (Egypt), Dr. Saleh Nasr (Tunisia), Dr. Faisal Al-Abdali (Libya), Dr. Hassane Darhmaoui (Morocco), and Dr. Ali Taher (Sudan), **representing African member countries** — the proposal for the 8th Middle East and Africa Regional IAU Meeting was thoroughly discussed and endorsed.
- Following the written approval and subsequent consultations, and after receiving broad agreement from the regional representatives, it has been officially confirmed that the 8th Middle East and Africa Regional IAU **Meeting (MEARIM 8) will be held in the United Arab Emirates in 2028. The meeting will be hosted by the University of Sharjah and the Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST), institutions that are committed to advancing astronomy and space science education, as well as supporting scientific collaboration across the region.**
- Additional regional activities, including an amateur astronomy/space-technology event planned in **Algeria (first half of 2026)** as stated in the recommendations.

**MEARIM 7 (7th Middle-east and Africa Regional IAU Meeting)**  
**“Advancing Space and Astronomy Sciences for a Sustainable  
Future”**

**11–13 November 2025, Amman, Jordan**

1. Meeting Number: **MEARIM 7** (7th Middle-east and Africa Regional IAU Meeting)
2. Meeting Title: **MEARIM 7 “Advancing Space and Astronomy Sciences for a Sustainable Future”**
3. Coordinating Division :**Division B: Facilities, Technologies and Data Science, Secondary: Division D, C, F, J**
4. Dedication of meeting (if any): **None**
5. Location (city, country): **Amman, Jordan**
6. Dates of meeting: **11–13 November 2025**
7. **Scientific Organising Committee:**

**Scientific Committee**

- **Mounib El-Eid** — Lebanon
- **Riyad Mnasrah** — Jordan
- **Mashhoor A. Al-Wardat** — Jordan / UAE
- **Shawqi Ali Al-Dalal** — Bahrain
- **Saleh Al-Shaythani** — Oman
- **Areg Mickaelian** — Armenia
- **Ashraf Shaker** — Egypt
- **Beshir Al Sayed Marzouk** — Qatar
- **Hanan Malkawi** — Jordan
- **Osama Shalabiea** — Egypt
- **Hala Jassar** — Kuwait
- **Aliaa Burqan** — Jordan
- **Mawiah Shadad** — Sudan
- **Hasnaa Chennaoui** — Morocco
- **Eqab Rabei** — Jordan
- **Hanna A. Sabat** — Jordan
- **Ammar Sakaji** — Jordan
- **Mohammad Al-Ahbabi** — UAE
- **Amjed Ali** — Pakistan
- **Basher El-Khasawneh** — UAE
- **Abdullah Al-Rikabi** — Iraq

- **Hassane Darhmaoui** — Al Akhawayn University in Ifrane, Morocco
- **Hayke Haroutinian** — Armenia
- **Dr. Faisal Al-Ansari** — Qatar
- **Ibrahim Naji** — Jordan

**Scientific Committee (Space, Remote Sensing, GIS, Geology, Climate Change)**

- **Hussam Al-Bilbisi** — Jordan
- **Najib Abou Karaki** — Jordan
- **Sattam Alshogoor** — Jordan
- **Akif Al Fugara** — Jordan
- **Mahmoud M. S. Albattah** — Jordan
- **Khalid Hazaymeh** — Jordan
- **Talbot Brooks** — USA
- **Tian Jin** — China
- **Mubaraka S. Algharaini** — Libya
- **Khitam Al-Zghoul** — Jordan
- **Faisal Al-Abdali** — Libya
- **Nivin Hassan** — Jordan
- **Mohammad Zahran** — Egypt
- **Rahaf Alrawas** — Syria
- **Ghaleb Faour** — Lebanon

**8. Local Organising Committee:**

- **Awni Mohammed Al-Khasawneh** — Jordan
- **Mashhoor A. Al-Wardat** — Jordan
- **Ali Nouh Quda** — Jordan
- **Mustafa M. Al-Kuisi** — Jordan
- **Ahmed Al-Malabeh** — Jordan
- **Walaa Al-Tamimi** — Jordan
- **Sattam Alshogoor** — Jordan
- **Mohammad Assiry** — Syria
- **Alaa Azzam** — Jordan
- **Ahmad Abu Shattal** — Jordan
- **Sohaib J Al-Slehat** — Jordan
- **Diala M. Taneenah** — Jordan
- **Motasem J Al-Slaht** — Jordan
- **Ayman Alhairat** — Jordan
- **Dalal Alalla** — Jordan
- **Mamoun Al-Nawafleh** — Jordan
- **Fayza Rashad** — Jordan
- **Khaled Al-Tal** — Jordan
- **Hani Dalee** — Jordan
- **Mohammed Gharaybah** — Jordan

- **Taghreed A. Alkadahat** — Jordan
- **Marwan Shwiki** — Jordan
- **Majd Obeidat** — Jordan
- **Ibrahim Khader** — Jordan
- **Mohammad Odeh** — Jordan
- **Khaled Alzawahreh** — Jordan

9. **Number of participants:** 196 (56 IAU grants)

10. **Countries represented:** 32 different countries

Participants represented a wide range of countries, with **Jordan** contributing the largest share at **90 participants (45.9%)**. This was followed by the **United Arab Emirates** with **19 participants (9.7%)**, **China** with **18 (9.2%)**, and **Egypt** with **17 (8.7%)**. **Syria** accounted for **8 participants (4.1%)**, while **Oman** had **7 (3.6%)** and **Iraq** contributed **6 (3.1%)**. **Armenia**, **South Africa**, and the **United Kingdom** were each represented by **4 participants (2.0%)**, whereas **Algeria**, **Bahrain**, **Iran**, **Lebanon**, and **Kazakhstan** each had **3 participants (1.5%)**. Countries represented by **2 participants (1.0%)** included the **United States**, **India**, **Libya**, **Tunisia**, **Saudi Arabia**, **Qatar**, **Ethiopia**, and **Tajikistan**. Finally, **Australia**, **Yemen**, **Palestine (State of)**, **France**, **Greece**, **Hungary**, **Namibia**, **Russia**, and **Turkey** were each represented by **one participant (0.5%)**.

## Scientific Highlights

The 7th Middle East and Africa Regional IAU Meeting (MEARIM7) provided a comprehensive and high-level scientific platform that brought together researchers, educators, policymakers, and practitioners from across the region and beyond. The scientific program featured a rich diversity of keynote lectures, parallel scientific sessions, workshops, and poster presentations covering a wide range of contemporary topics in astronomy, space sciences, and related interdisciplinary fields. These included solar and space physics, stellar and galactic astrophysics, cosmology, planetary science, exoplanets and habitability, space technology and CubeSat missions, artificial intelligence and data science applications, Earth observation, climate change, sustainability, science education, heritage, and the philosophy of space exploration. The breadth of contributions reflected both fundamental research advancements and applied scientific solutions aligned with sustainable development goals, with particular emphasis on regional capacity building and international collaboration.

A notable strength of the conference was its strong international and regional engagement, with contributions from leading institutions, space agencies, and research centers worldwide. Special attention was given to emerging areas such as space law and policy, gender equality in space sciences, youth engagement, and the integration of advanced digital tools, including AI, remote sensing, and big data analytics, into astronomical

research and education. The workshops further strengthened hands-on skills and knowledge transfer, particularly in radio astronomy, celestial geometry, and scientific publishing. Overall, MEARIM7 successfully fostered scientific exchange, interdisciplinary dialogue, and the development of strategic visions for advancing astronomy and space sciences in the Middle East, Africa, and the global community

## **Final Comments**

The participants of MEARIM7 expressed their deep appreciation for the gracious patronage and continuous support for science and scientists, which played a pivotal role in the success of this major regional scientific event. The conference outcomes underscored the importance of sustained cooperation among universities, research institutions, space agencies, and international organizations in strengthening scientific excellence and innovation across the region. The adopted recommendations emphasized recognizing the University of Jordan as a regional reference center in astronomy and space sciences, enhancing Arab-led scientific collaboration, and supporting joint research, education, and infrastructure development, including the establishment of shared digital platforms and observatories

Looking forward, the conference reaffirmed its commitment to organizing future regional and international scientific events, including MIRAM8, and to aligning scientific research with societal needs, sustainability, and youth empowerment. MEARIM7 concluded with a strong collective vision to advance astronomy and space sciences as drivers of knowledge, innovation, cultural heritage preservation, and sustainable development, while reinforcing the region's role as an active contributor to the global scientific community. The organizers and participants alike expressed confidence that the outcomes of this conference will have a lasting impact on regional scientific collaboration and future generations of researchers



**Dr. Eng. Awni M. Khasawneh**

Secretary-General, Arab Union for Astronomy & Space Sciences (AUASS)

Email: [kawni@yahoo.com](mailto:kawni@yahoo.com) / [mearim7-conf@auass.com](mailto:mearim7-conf@auass.com)

Phone No.: +962795070941