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ARMENIAN  
ASTRONOMICAL SOCIETY

# ArAS Newsletter



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## LOCAL NEWS

### BAO Researchers at IAU General Assembly

On 2-11 August, [the 31st General Assembly](#) of the International Astronomical Union (IAU) took place in the city of Busan, Republic of Korea. Entitled “Astronomy for All”, it addressed key topics in contemporary astronomy and assessed the latest scientific progress in a number of specialized areas.

Although hosted in Korea for the first time, it gathered more than 1,700 astronomers from 83 countries. Because of the COVID precautions, the General Assembly was held in a hybrid format.



Eva Gevorgyan, Areg Mickaelian, Gor Mikayelyan, Naira Azatyan, Hayk Abrahamyan and Armine Patatanyan.  
Busan. 2022.

The researchers of the Byurakan Astrophysical Observatory were also among the participants. Areg Mickaelian, the Director of BAO and acting president of ArAS, Researchers Hayk Abrahamyan, Gor Mikayelyan and Junior Researcher Naira Azatyan made reports and presented scientific posters. Armenia was also represented by Armine Patatanyan, who now is remotely working at the IAU Office of Astronomy for Development (OAD). Armine is also

one of the Armenian coordinators of the IAU Office of Astronomy for Education (OAE NAECs).

The program of the General Assembly 2022 included seven symposia and 10 multi-session focus meetings, as well as further dedicated meetings organised by the IAU Divisions, Offices, Commissions and Working Groups. Alongside thousands of scientific presentations, there were numerous policy discussions and exciting media events.

Armenian participants took part in the IAU Symposia #368, #369, #371, Focus Meetings (FM) #04, #07, and OAD sessions.

#### **BAO Talks:**

IAU FM 4 (*UV Insights to Massive Stars and Young Stellar Clusters*): Naira Azatyan – *The Stellar Content of UC HII Regions: The Molecular Cloud GRSMC 045.49+00.04*

IAU FM 7 (*Astrometry for 21st Century Astronomy*): Areg Mickaelian – *Luminosity function of white dwarfs and discovery of new white dwarfs by means of Gaia EDR3 data*

OAD session: Areg Mickaelian – *Astronomy in the Crossroads of Inter- and Multi-Disciplinary Sciences*

OAD session: Areg Mickaelian – *South West and Central Asia ROAD*

OAD session: Armine Patatanyan – *Astronomy for Mental Health*

#### **Posters:**

IAU S368 (*Machine Learning in Astronomy: Possibilities and Pitfalls*): Gor Mikayelyan – *Astronomical objects classification based on the Digitized First Byurakan Survey low-dispersion spectra*

IAU S369 (*The Dawn of Cosmology & Multi-Messenger Studies with Fast Radio Bursts*): Hayk Abrahamyan -

IAU S371 (*Honoring Charlotte Moore Sitterly: Astronomical Spectroscopy in the 21st Century*): Areg Mickaelian -

Areg Mickaelian was SOC member of the OAD session, as well as he participated in several business meetings during the IAU GA.

It should be noted that the IAU General Assemblies are held every 3 years and last for about 2 weeks. BAO has been participating in these important scientific events since 1948.

Next IAU GA will be held in 2024 in Cape Town, South Africa. It was decided that the IAU GA in 2027 will be held in Rome, Italy.



## The 8th Byurakan Science Camp

The Byurakan Astrophysical Observatory (BAO) organized an annual science camp for school children.

The 8th Byurakan Science Camp (8BSC) was held on 25-31 July, and involved children aged 12-14 from different regions of the Republics of Armenia. The participants of the “World of Knowledge” competition were also involved.



8BSC. BAO. 2022.

As always, the science camp stood out with its rich program. It launched with the introductory excursions, which helped the children to learn about the observatory, its founder Victor Ambartsumian's life and activities, as well as the telescopes.

Within the framework of the program, the children enriched their knowledge by participating in interactive lectures held by specialists of various fields, including BAO Director Areg Mickaelian, BAO Researchers Hayk Abrahamyan, Naira Azatyan, Hovhannes Pikichyan, Ararat Yeghikyan, Hayk Malkhasyan, Sona Farmanyan and Gurgen Paronyan. Among the invited lecturers were Vazgen Gabrielyan and Sergey Brutyan.

The camp participants also took part in different games and competitions, testing their knowledge in Astronomy and Geography. During their free time, they went to the sightseeing in the nearby historical places.

On the last day of the science camp, winners of the competitions were awarded special prizes. Getting acquainted with the impressions of the participants, Sona Farmanyan and Eduard Karapetyan, Deputy Director of the Fund for Armenian relief (FAR) wished all the children good luck and success.

It should be noted that the 8BSC camp was partially funded by FAR.

## Viktor Ambartsumian Memorial Day

On 12 August marked the 26th anniversary of the death of Viktor Ambartsumian, the prominent Armenian astrophysicist of the 20<sup>th</sup> century and founder of the School of Theoretical Astrophysics in the Soviet Union.

On Viktor Ambartsumian Memorial Day the Byurakan Astrophysical Observatory's staff members visited Pantheon to pay homage to the great scientist.



It should be noted that BAO's pantheon, which was created in 1965, received the status of a newly discovered monument of local significance by the decision of the expert commission of the Ministry of Education, Science, Culture and Sports of the Republic of Armenia only in 2021. V. Ambartsumian was born on 18 September, 1908. He is one of the greatest scientists of the XX century, the greatest Soviet astrophysicist and the founder of the theoretical astrophysics school in the USSR that has fundamentally contributed to various fields of astronomy and astrophysics, cosmogony, theoretical physics, mathematics, and philosophy. His revolutionary works on stellar evolution and activity of galactic nuclei turned over the development of astrophysics. Ambartsumian was also a great organizer of science, important political and public figure.



## Telescope Installed in Artsakh

The employees of the Byurakan Astrophysical Observatory (BAO) chief engineer Ashot Petrosyan, leading engineer Henrik Sargsyan, engineer Henrik Datumyan and Ashot Khachatryan were recently on a business trip to the Republic of Artsakh.

This is already the fourth visit within the framework of cooperation established between the BAO and Artsakh Scientific Center.



Leading engineer Henrik Sargsyan. Artsakh. 2022.



Installation of the Telescope. Artsakh. 2022.

The purpose of the visit was the installation of the 30cm telescope of the Newtonian system provided by the BAO to the Artsakh Scientific Center. Now the telescope is installed on the roof of school No. 9, in a specially prepared pavilion and is in the working condition.



## “Traektoria” Astrophysics School in Armenia

On August 11, within the framework of the "Traektoria" Astrophysics school, students of senior classes from different regions of the Russian Federation visited the Byurakan Astrophysical Observatory (BAO).

The participants attended the lecture by BAO Senior Researcher Elena Nikoghosyan on "Young stellar objects, their birth and evolution". They also visited the largest 2.6m telescope and Victor Ambartsumian's house-museum to learn about BAO history and activities.



Traektoria astrophysics school 2019. BAO.

“Traektoria” Astrophysics school aims at developing interest in science and scientific research, implementing educational and educational programs in the field of natural sciences and humanities. The school is a three-year cycle that includes trainings in key subjects for further successful study of astronomy and astrophysics.

## INTERNATIONAL NEWS

### **STARMUS VI in Armenia**

#### **50 Years on Mars**

In September 2022, one of the world-scale science and art festivals, will take place in Yerevan, Armenia. The sixth Starmus will be dedicated to Mars, from the very first Soviet MARS 3 to the ambitious manned landing plans and spectacular NASA missions.

Created by Dr. Garik Israelian, astrophysicist at the Institute of Astrophysics of the Canary Islands (IAC) and Dr. Brian May, astrophysicist and the lead guitarist of the iconic rock band Queen, the Starmus Festival is a combination of science, art and music that has featured presentations from Astronauts, Cosmonauts, Nobel Prize Winners and prominent figures from science, culture, the arts and music.

This year Starmus will gather world-class scientists, engineers, artists, and astronauts to celebrate science communication. Among the famous speakers will be Astrophysicists and Nobel Laureates John Mather and Michel Mayor. The letter was also a member of the steering committee of the [Viktor Ambartsumian International Prize](#).

In the past, Starmus has hosted several Apollo astronauts, world known scientists, 25 Nobel prize winners and space explorers have shared their science from the Starmus stage, among them Stephen Hawking, May-Britt Moser, Emmanuelle Charpentier, Elizabeth Blackburn, Donna Strickland, Jill Tarter, Kip Thorne, Robert Wilson, Michel Mayor, Eduard Moser, Neil deGrasse Tyson, Richard Dawkins, Brian Cox, Tony Fadell, and many other giants of science.

The background of the top section is a composite image. On the left, a dark space scene with stars. On the right, a large, detailed view of the planet Mars, showing its reddish-orange surface, polar ice caps, and various craters and canyons.

STARMUS

# STARMUS VI

## 50 YEARS ON MARS

SEPTEMBER 5-10, 2022  
YEREVAN, ARMENIA

Stephen Hawking and Alexei Leonov, together with the rock star and astrophysicist Brian May, worked to create the Stephen Hawking Medal for Science Communication, awarded to individuals and teams who have made significant contributions to science communication.

Check [Starmus webpage](#) to learn more about one of the iconic science festivals of the year.



*ArAS News* is the electronic newsletter of the Armenian Astronomical Society. It was distributed to all ArAS members from the beginning of 2002, 4 times a year, typically at the end of each trimester. In 2009-2014, 8 issues annually and since 2015, 12 issues annually have been released.

ArASNews publishes information materials on ArAS, Byurakan Astrophysical Observatory and the Armenian astronomy in general, reports on ArAS Annual Meetings and participation of the Armenian astronomers in important international meetings, articles on occasion of anniversaries of famous Armenian astronomers and ArAS members, acceptance of new ArAS members, achievements of the Armenian astronomers, astronomical education in Armenia, Armenian archaeoastronomy, as well as science articles (reviews) on important studies.

So, if you want to share your studies with the scientific community, send us your articles to [melin.asryan@gmail.com](mailto:melin.asryan@gmail.com). They will be reviewed for the publication in ArAS Newsletters next issues.

[ArAS Newsletter issues](#) are available online.