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# ArAS Newsletter



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## LOCAL NEWS

### PhD Thesis Defense at the Byurakan Astrophysical Observatory

On November 17, Junior Research Associate of the Byurakan Astrophysical Observatory (BAO) Naira Azatyan defended her PhD thesis, the defense being held at the BAO.

The thesis was devoted to “Search and study of young infrared stellar clusters”.

The scientific advisor of Naira was Leading Research Associate in the “Department of Non-Stable Phenomena” at BAO, Candidate of Phys. Math. Sciences Elena Nikoghosyan.

The official opponents were the Doctor of Phys. Math. Sciences Gagik Ter-Kazarian (BAO) and Candidate of Phys. Math. Sciences Mekhak Hayrapetyan (Yerevan State University).



Naira Azatyan. PhD Defense. BAO.

Learn more about Naira’s work reading the [abstract](#) now.

## Remote Laboratory Grant Competition Results

The topic of the foreign consultant of the Byurakan Astrophysical Observatory (BAO) *Dr. Valeri Hambaryan* and BAO researchers was among the approved scientific topics to receive funding as a result of the RA Science Committee Remote Laboratory Grant Competition. The competition was held within the framework of contractual (thematic) financing of scientific and scientific-technical activities.



BAO 2,6m Telescope

The topic is devoted to “Search and identification of high-velocity stars through dynamic emission from multiple stars and supernova explosions”. The supervisor of the research topic is Valeri Hambaryan and the co-supervisor is BAO researcher Satenik Ghazaryan. In addition, BAO young scientists Liana Hambardzumyan and Karen Gigoyan, as well as a YSU student are involved in the research group.

As a result of the competition, 18 topics were selected. Each research group will receive up to 152.5 million AMD for five years (2022-2027).

It should be mentioned that the topic leaders are high-ranking scientists living abroad.

## World Science Day for Peace and Development

On November 10, the world was celebrating Science Day for Peace and Development. The day highlighted the important role of science in society and the need to engage the wider public in debates on emerging scientific issues. It also underlined the importance and relevance of science in our daily lives.



The day was also celebrated at the Academy of Sciences of the Republic of Armenia. The academy hosted an event, where the Association of Young Scientists conducted different scientific experiments, organized poster and photo exhibitions for high school and university students.

The Byurakan Astrophysical Observatory was among the participating scientific institutions.

## ANNIVERSARIES

### Vagharshak Sanamian's 105<sup>th</sup> Anniversary



Vagharshak Sanamian

Vagharshak Sanamian (1917-2010) was born on November 17, 1917 in Karabagh. After finishing the local school, he moved to Yerevan, and entered the Yerevan State University, Department of Engineering-Mathematics. Soon, after his application, the Second World War began and he was called to serve in the Soviet army. During his service he managed to get theoretical courses at the radio-locational department of the Military Communications Academy named after Marshal of the Soviet Union S. M. Budyonny.

In 1946, he returned from the army and graduated from the Yerevan State University. From 1949 to 1950 he worked at the Yerevan State University in the Mathematics Department. Starting from 1950 he worked at Byurakan Astrophysical Observatory (BAO) as a senior researcher.

In 1957, V. Sanamian defended his PhD thesis on radio astronomy having famous Russian radio astronomer S.E.Khaikin as his supervisor.

For years V. Sanamian supervised radio astronomical studies at the BAO. He participated in a number of international collaborations including collaboration between BAO and Indian Astronomical Centers. He worked on flare stars, the Sun and Markarian galaxies, Herbig-Haro Objects and other important radio sources.

He also worked at Institute of Radiophysics and Electronics in Ashtarak.

V. Sanamian was an ArAS member.

## OBITUARIES

### Carolina Ödman-Govender Passed Away

It is with great sadness that we communicate the passing of Carolina Ödman-Govender.

Carolina was an Associate Professor at the University at the Western Cape (UWC) and Associate Director: Development & Outreach for the Inter-University Institute for Data Intensive Astronomy in South Africa (IDIA).

As the first International Project Manager of Universe Awareness (UNAW) at Leiden University from 2005 to 2010 and Organizing Committee Member of Commission C2 Communicating Astronomy with the Public, Dr. Carolina Ödman-Govender's pioneering work has changed the astronomy outreach, development and education landscape.

In 2018, during the XXX IAU General Assembly, she was awarded a special IAU award for Astronomy Outreach, Development and Education.

[IAU](#) President Debra Elmegreen notes, “Carolina was a role model of courage and resilience, and her eternal good cheer was an inspiration for us all.”

Armenian scientists have had very good contacts and collaborations with Carolina through her projects. Especially active were relations in the frame of the IAU SWCA Regional Office of Astronomy for Development (ROAD).

Dr. Carolina Ödman-Govender will be greatly missed, and her memory and legacy will continue on.



Carolina Ödman-Govender

## OTHER NEWS

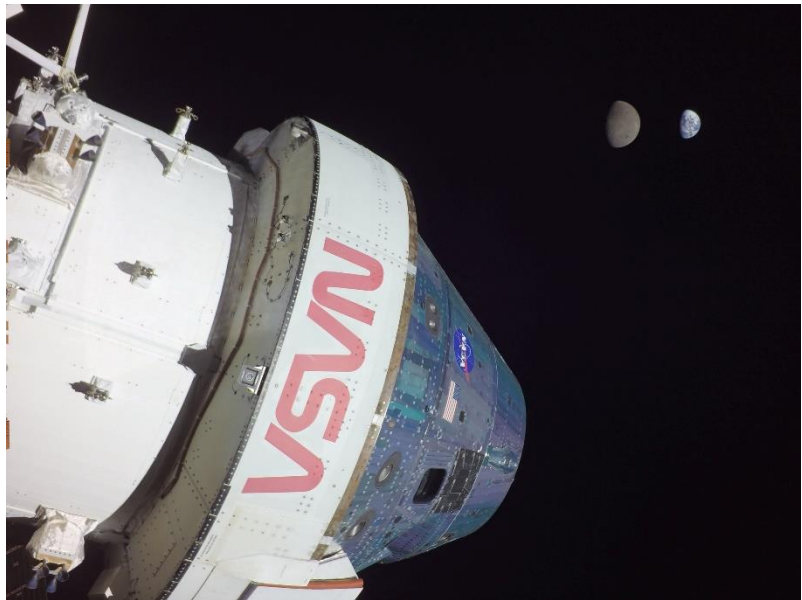
### Artemis I —Orion Goes the Max Distance

We learn from [NASA](#), that on November 30, flight day 13 of the Artemis I mission, NASA's unscrewed Orion Spacecraft reached its maximum distance from Earth, 268,563 miles away from home. The overall mission will last 25.5 days.

Throughout the day the spacecraft captured imagery of Earth and the Moon together, including of the Moon appearing to eclipse Earth.

Reaching the halfway point of the mission on Flight Day 13, the spacecraft remains in healthy condition as it continues its journey in distant retrograde orbit, an approximately six-day leg of its larger mission thousands of miles beyond the Moon.

"Because of the unbelievable can-do spirit, Artemis I has had extraordinary success and has completed a series of history making events," said NASA Administrator Bill Nelson. "It's incredible just how smoothly this mission has gone, but this is a test. That's what we do – we test it and we stress it."



© NASA

Engineers had originally planned an orbital maintenance burn today but determined it was not necessary because of Orion's already precise trajectory in distant retrograde orbit. Based on Orion's performance, managers are examining adding seven additional test objectives to further characterize the spacecraft's thermal environment and propulsion system to reduce risk before flying future missions with crew.

## BlueWalker 3 Satellite Raises Concerns

Astronomers express concern about the recently launched prototype BlueWalker 3 satellite's impact on astronomy.

According to the [International Astronomical Union](#) (IAU), new measurements reveal that this low Earth orbiting satellite is now one of the brightest objects in the night sky.



© IAU

The prototype satellite called BlueWalker 3 was launched into low Earth orbit on 10 September 2022 by AST SpaceMobile. It has a 64-square-meter (693-square-foot) antenna system (the largest commercial antenna system ever deployed into low Earth orbit) and is the first of what is expected to be more than a hundred similar or even larger satellites.

New measurements by observers worldwide, coordinated by the IAU's

CPS (IAU Center for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference), show that this satellite has become one of the brightest objects in the night sky — more so than other constellation satellites and at times as bright as some of the most recognizable stars.

Besides their visible brightness, these new satellites, which serve as “cell phone towers in space,” will transmit strong radio waves at frequencies currently reserved for terrestrial cell-phone communications. These orbiting transmitters, which are not subject to the same radio quiet zone restrictions as ground-based cellular networks, have the potential to severely impact radio astronomy research as well as geodesy studies and space-physics experiments.

The IAU addressed the U.S. Federal Communications Commission (FCC) on behalf of the global astronomy community urging them to seriously consider the potential impacts of satellite constellations on astronomy, the appearance of the night sky, and the environment. Moreover, conversations between the IAU CPS and AST SpaceMobile have already started.

*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.