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ArAS Newsletter



Byurakan Astrophysical Observatory 7

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LOCAL NEWS

The Opening Ceremony of Astronomy Laboratory in Artsakh

On October 7, a memorandum of cooperation was signed between the Byurakan Astrophysical Observatory (BAO) and the Artsakh Scientific Center of the National Academy of Sciences of the Republic of Artsakh, which was followed by the official opening ceremony of the Astronomy laboratory.

Director of BAO Areg Mickaelian and director of the Artsakh Scientific Center Anyuta Sargsyan discussed activities to be carried out within its framework, namely to provide professional guidance and consultation to the Artsakh Astronomical Laboratory, involve young people of Artsakh, coordinate astronomical cooperation between the BAO and Artsakh, organize joint conferences, workshops, seminars, youth schools and lectures both at Artsakh



Left: Anyuta Sargsyan. Right: Areg Mickaelian

State University and schools. Regular visits of Artsakh students and schoolchildren to the Byurakan Astrophysical Observatory will be organized. Also, the telescope installed by the BAO in Artsakh will be used both for professional and educational purposes.

Within the framework of this business trip (October 6-9) Areg Mickaelian and Gayane Baleyan, the head of the public relations department of BAO had a meeting with the Minister of Education and Science of the Republic of Artsakh Lusine Gharakhanyan. During the meeting Astronomy development and opportunities of scientific cooperation were discussed.

Artsakh has always been in the center of BAO's attention. BAO scientists have been visiting Artsakh for many years and this year was not an exception. During his visit Areg Mickaelian delivered lectures at several schools.

Back in 2006, a 30 cm Newton telescope was installed at the Artsakh State University in Stepanakert. In 2020, a cooperation agreement was signed. As for this new memorandum, it is another proof of the continuous development of the cooperation.

The Research Groups of the Byurakan Astrophysical Observatory – Grant Winners

Three research groups from the Byurakan Astrophysical Observatory (BAO) were awarded grants announced by the Science Committee of the Ministry of Education, Science, Culture and Sports of the Republic of Armenia.



Elena Nikoghosyan, Areg Mickaelian, Tigran Magakian

On October 11, the list of guaranteed scientific topics for funding was approved. As a result of the competition, 49 research groups of 6-7 people led by leading scientists operating in Armenia will receive funding for 5 consecutive years. Two of the approved research groups were from the BAO. The heads of the research groups were Areg Mickaelian (topic: Discovering the early stages of galactic evolution through multidisciplinary study of active galaxies) and Yelena Nikoghosyan (topic: Regions of Stellar Formation: Formation and Evolution).

By another order, the list of scientific topics for the purpose of thematic financing of scientific and scientific-technical activities was approved. Among the winners was the group led by Tigran Magakian, principle research associate at BAO (topic: young stellar objects with extreme extravagant activity).

It should be noted that all three groups of BAO mostly comprise young researchers. Thus, 16 out of 36 BAO researchers (44%) will receive additional funding due to their scientific activity, which at least double their regular salaries.

The 7th Byurakan Science Camp

According to tradition, the Byurakan Astrophysical Observatory (BAO) organized an annual science camp for school children.

The 7th Byurakan Science Camp (7BSC) was held on October 25-30 and involved children aged 12-14 from the Republics of Armenia and Artsakh.

The scientific camp had a rich program as always. It launched with the introductory excursions, due to which the children got acquainted with the observatory, learnt about Victor Ambartsumian's life and activities, and visited the largest 2.6m telescope and more. It was followed with the nearby sightseeing.

Within the framework of the program, the children enriched their knowledge by participating in interactive lectures



7BSC participants at 1m Schmidt Telescope

held by specialists of various fields, including BAO Director Areg Mickaelian, BAO researchers Hayk Abrahamyan, Naira Azatyan, Hovhannes Pikichyan, as well as Karen Tokhatyan, a researcher at the Institute of History of the National Academy of Sciences of the Republic of Armenia. They also took part in sports games, English language classes, tested their knowledge during astronomical, geographical and other intellectual contests, as well as acquired some practical skills, for instance launched a rocket from the observatory.



7BSC Award Ceremony

On the last day of the science camp, children were surprised with the awards and certificates. Getting acquainted with the impressions of the participants, Areg Mikaelyan, Director of BAO 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 camp was organized by the Byurakan Astrophysical Observatory and the Armenian Astronomical Society (ArAS). Being funded by BAO and FAR the 7BSC included no participation fee.

Tree Named After Viktor Ambartsumian in the “Eternals Park”

On October 25, Director of BAO, Areg Mickaelian together with other representatives of science, culture, and sports, as well as parents and relatives of the heroes of the 44-day war, took part in tree planting in the Eternals park. The event was organized by Tovmasyan International Foundation.



7BSC participants help Areg Mickaelian to plant the tree

Trees named after about 100 famous Armenian people of science, culture and sports were planted, including the ones named after Viktor Ambartsumian, Anania Shirakatsi, Alikhanyan brothers, Grigor Gurzadyan and Alexander Kemurdzhian.

The children participating in the 7th Byurakan Scientific Camp, also attended this event, helping Areg Mickaelian to plant the tree named after our greatest scientist.

HISTORY PAGES

40 YEARS AGO

Principle of Invariance and its Applications

40 years ago, on October 26-30, 1981, the Byurakan Astrophysical Observatory (BAO) hosted an international symposium which was devoted to the 40th anniversary of V.A. Ambartsumian's Principle of Invariance.

Results of the application of principle of invariance and its development in various fields of modern science were discussed. Astrophysicists, physicists, mathematicians – representatives of different schools of exact sciences participated in the symposium.



Viktor Ambartsumian together with Other Participants. BAO

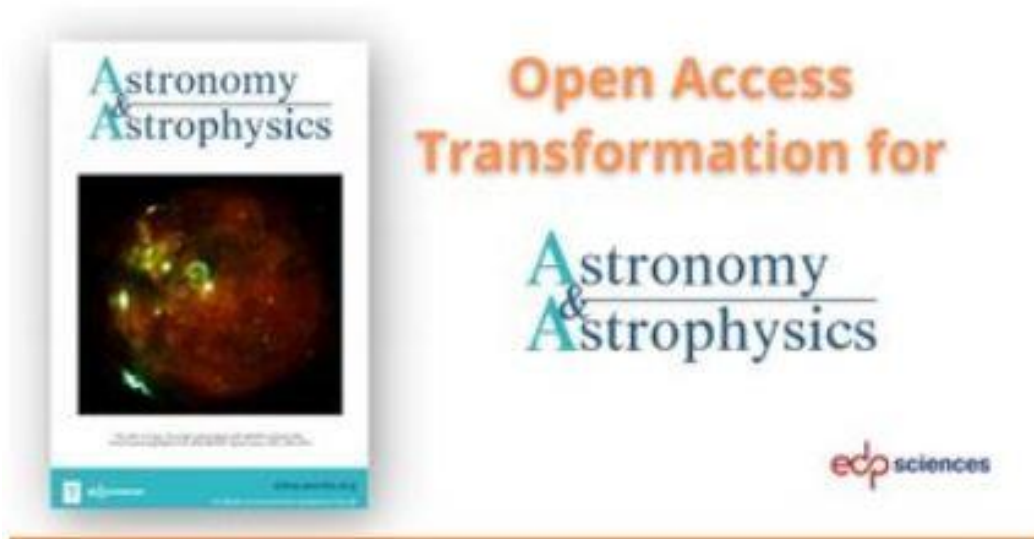
Among the participants, were such prominent scientists as S. Chandrasekhar (USA), C.H. Papas (USA), V.V. Sobolev (USSR). Altogether there were 65 participants, including 8 from the BAO, 12 from other institutes of Armenia, 35 from other republics of the Soviet Union, and 10 scientists from 7 foreign countries (USA, Japan, France, Czechoslovakia, Hungary, GDR, and Poland).

At the symposium 46 talks were presented, including 3 invited reviews (by V.A. Ambartsumian, S. Chandrasekhar and V.V. Sobolev), 23 reports on radiation transfer theory and 20 reports on applications to other problems of physics and mathematics. Byurakan astronomers had 8 talks.

80 years ago, Viktor Ambartsumian introduced the principle of Invariance to solve the radiative transfer problems. Titled “Development of the principle of invariance, a new theory of light scattering in turbid medium” it was published in the scientific journals “Journal of Physics” and «Известия Академии наук СССР» (“Izv. Acad Sci. USSR”).

INTERNATIONAL NEWS

Astronomy & Astrophysics Journal Will Have Open Access from 2022



On October 19, the A&A Board of Directors has announced that with the continued support of subscribers, Astronomy & Astrophysics (A&A) journal will be published open access in 2022 under a Subscribe-to-Open model.

Since its launch in 1969, A&A has been publishing pioneering, peer reviewed scientific content. The transition to open access will extend access of its high-quality research to a worldwide audience – furthering the field of astronomy and astrophysics. Library subscriptions, together with substantial contributions from the A&A sponsoring countries, will cover publication and editorial costs and enable content to become open access.

“We have long been interested in transitioning A&A to open access, and have followed recent developments closely”, said Professor André Moitinho de Almeida, Chairperson of the A&A Board of Directors.

A&A Board of Directors meeting 2021 had been planned to hold in Armenia, yet due to restrictions posed by COVID-19, Armenia was announced the host of 2022 meeting.

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. They will be reviewed for the publication in ArAS Newsletters next issues.

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