

ARMENIAN ASTRONOMICAL SOCIETY

ArAS Newsletter



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LOCAL NEWS

Annual Meeting of Division of Physics and Astrophysics of NAS RA

On April 20, the National Academy of Sciences of the Republic of Armenia (NAS RA) hosted Annual Meetings of its 5 Divisions and on April 21, the NAS RA General Meeting was held. The researchers of the Byurakan Astrophysical Observatory participated in the meeting of the Physics and Astrophysics Division, during which Academician-Secretary of the Division Radik Kostanyan presented the main results of scientific and scientific-organizational activities.

The meeting was followed by the discussion of various issues scientific presentations later on: the BAO leading research associate Elena Nikoghosyan, "Star Formation Domains, Formation and Evolution", Director of the IKRANET Center, Ph.D. Narek Sahakyan, "Modeling radiation spectrum of blazars. SOPRANO code", and others.

On April 21, the Annual General Meeting of the NAS of RA took place, during which the president of the NAS of RA, academician Ashot Saghyan



BAO Leading Research Associate Elena Nikoghosyan. Physics and Astrophysics Department Annual Meeting. NAS RA

presented the main results of the scientific activity of the NAS of RA in 2022. The academician-secretary, correspondent member of RA NAS Artur Ishkhanyan will present the scientific organizational activities of RA NAS in 2022.

Memorandum of Understanding Between the Byurakan Astrophysical Observatory and the World Data System, an International Science Council Affiliated Body

The Byurakan Astrophysical Observatory (BAO) and the World Data System (WDS), an International Science Council (ISC) Affiliated body signed a Memorandum of Understanding. The purpose of this Memorandum of Understanding (MOU) is to define the conditions under which the Byurakan Astrophysical Observatory will join the World Data System as an Associate Member.



From School to Space Aras School Lectures Program 2023

This April was dedicated to the school lectures program entitled "From School to Space". The program was jointly organized by the Byurakan Astrophysical Observatory (BAO) and Armenian Astronomical Society (ArAS).

The interest towards the program was unprecedented this year. 132 schools applied to host it. Considering that fact, this year BAO researchers visited 33 schools in different provinces of Armenia, namely Aragatzotn, Syunik, Ararat, Armavir, Gegharkunik, Lori, Kotayq, Shirak, Tavush and Vayots Dzor.

Among the lecturers were the Director of BAO Areg Mickaelian, Senior Research Associate Hovhannes Pikichian, Research Associates Hasmik Andreasyan, Naira Azatyan and Hayk Malkhasyan.

During the visits our lecturers introduced different astronomical topics as well as distributed popular



BAO. "From School to Space" Lecture Program. 2023

materials to the schools and schoolchildren. As promised, some schools received telescopes as well.

ArAS School Lectures program was initiated by the ArAS Co-President Prof. Yervant Terzian (Cornell University, N.Y., USA) to promote astronomy in the Armenian schools and facilitate interaction with professional astronomers. Typically, once in a year starting from 2012, professional astronomers visit 25-30 schools and deliver lectures on hot topics of astronomy, achievements of the Armenian astronomy, activities of the Byurakan Astrophysical Observatory, etc. The program also aims at revealing talented children especially in remote regions to unlock their potential in science.

The lecture program was supported by the Fund for Armenian Relief (FAR). Beside the lecturers, one should mention the program coordinator Sona Farmanyan, organizers and assistants Gor Mikayelyan and Gayane Baleyan.

INTERNATIONAL NEWS

European Astronomical Society 2022 Prizes



European Astronomical Society 2023 Prizes

The European Astronomical Society announced its 2022 Prizes: Tycho Brahe Medal, Lodewijk Woltjer Lecture, Fritz Zwicky Prize for Astrophysics & Cosmology and MERAC Prizes.

Tycho Brahe Medal

The 2022 Tycho Brahe Medal is awarded to Dr Jean-Luc Starck (CEA Paris Saclay, France) for the development of novel astro-statistics methods and open source analysis tools which have enabled optimal scientific exploitation of astronomical data obtained from European space and ground-based facilities leading to major discoveries in extragalactic astrophysics and cosmology.

Lodewijk Woltjer Lecture

The 2022 Lodewijk Woltjer Lecture is awarded to Prof. Bożena Czerny (Center for Theoretical Physics, Polish Academy of Sciences, Poland) for her contributions to our understanding of the physics of accretion disks and the broad line regions in active galactic nuclei, as well as for her application of quasars to constrain the cosmological model at high redshift and open a window on the role of dark energy.

Fritz Zwicky Prize for Astrophysics & Cosmology

The 2022 Fritz Zwicky Prize for Astrophysics & Cosmology is awarded to Prof. Ewine F. van Dishoeck (Leiden University, the Netherlands) for her groundbreaking, decades panning, work in observational astrochemistry and molecular spectroscopy, revealing the secrets of molecules

from interstellar clouds to star and planet formation, and for her leadership within the astronomical community.

MERAC Prizes

The 2022 MERAC Prizes for the Best PhD Thesis are awarded in Theoretical Astrophysics to Dr Helmer Koppelman (the Netherlands) for his multi-faceted approach to the field of galactic archaeology that transformed our understanding of the history and dynamics of the Milky Way. Observational Astrophysics to Dr Núria Miret Roig (University of Vienna, Austria) for the discovery of many new free-floating planets, which illuminated the origin of these exotic nomad planets. New Technologies (Instrumental) to Dr Ewelina Obrzud (Centre Suisse d'Electronique et de Microtechnique, Switzerland) for the development of novel laser frequency combs for the accurate calibration and extreme radial velocity-precision of astronomical spectrographs. All six awardees will give a plenary lecture at the European Astronomical Society Annual Meeting 2022 to be held in Valencia, Spain, from 27 June to 1 July 2022.

OTHER NEWS

International Dark Sky Week 2023

International Dark Sky Week is a weeklong celebration of the night.

Light pollution from a variety of sources, both on the ground and in orbit, is threatening the night sky at an alarming rate.

According to one recent study, the world is currently seeing an <u>average increase of 9.6% in the</u> brightness of the sky. This means fewer stars are visible today.

The <u>International Dark Sky Association</u> hoped to raise awareness about the growing light pollution crisis with International Dark Sky Week 2023. The event gathered astronomers and skywatchers attempting to raise awareness of the damage that light pollution can do to observations of space from Earth.

On April 22, astronomers across the globe were encouraged to take part in activities that celebrate the wonders of the night sky and call attention to what each of us can do to combat light pollution.

The eight-day event had a serious cause, pointing out the need to protect our natural nighttime environment to policymakers and the public, as well as illustrating how vital dark skies were to our ongoing investigation of space.

Earth Day

Earth Day is an annual celebration that honors the achievements of the environmental movement and raises awareness of the need to protect Earth's natural resources for future generations. Earth Day is celebrated on April 22 in the United States and on either April 22 or the day the spring equinox occurs throughout the rest of the world.



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 <u>melin.asryan@gmail.com</u>. They will be reviewed for the publication in ArAS Newsletters next issues.

And S Newsletter issues are available online.