### **ArAS News**

NEWSLETTER

ARMENIAN ASTRONOMICAL SOCIETY (A r A S)



February 28, 2020

Editor: Sona FARMANYAN

ArAS Newsletter online at: <a href="http://www.aras.am/ArasNews/arasnews.html">http://www.aras.am/ArasNews/arasnews.html</a>

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### Dear Colleagues,

We are happy to restart the online publication of ArAS Electronic Newsletter ArASNews. During 2015-2017 we managed to publish the newsletter monthly and provided a lot of information to Armenian astronomers all over the world and many others. However, after the 1st issue of 2018, we had some difficulties and temporarily stopped the release of the next issues. Instead, BAO pressreleases provided some short info on the events related to BAO and Armenian astronomy.



Now we have decided to renovate the publication. Hopefully, ArASNews will regularly continue and serve as an important link for Armenian astronomers.

The year 2020, as all previous ones, is full of interesting and important events, such as meetings, schools for young astronomers, etc. BAO and ArAS are organizing the European journal *Astronomy & Astrophysics* Board of Directors meeting in May in Yerevan, the 7th Byurakan International Summer School (7BISS) for young astronomers and an International Symposium "*Astronomical Surveys and Big Data 2*" in September in Byurakan. Viktor Ambartsumian International Science Prize 2020 award is also expected for this year. Many other events are planned as well, so we are looking forward for a rich astronomical year and very fruitful and useful ArAS newsletters.

Areg Mickaelian, ArAS Acting President Sona Farmanyan, ArASNews Editor



### Viktor Ambartsumian

### **International Science Prize 2020**



Viktor Ambartsumian International Science Prize is one of the important awards in astronomy/astrophysics and related sciences. It is being awarded to outstanding scientists having significant contribution in physical-mathematical sciences from any country and nationality. The Prize is being awarded once every two years since 2010. During 2010-2016 it was established by the Armenian Government as USD 500,000. Since 2017 it is USD 300,000. Since 2019 it is included among the Armenian State Prizes.

To apply for the Prize, a work may be presented by an author or authors' group (not more than 3 persons). The cash award is being equally shared between the winners, and a diploma, a medal and a certificate are being awarded to each winner. The winner(s) receive(s) USD 200,000 as personal award and USD 100,000 is being used for research projects and foreign fellowships for Armenian scientists, organization of meetings in Armenia, and stipends for Armenian students (all under the supervision of the Prize Steering Committee and the Prize Winners of the given year).

### The right for the nomination of works is reserved to

**Nobel Prize Winners** 

Presidiums of national academies of sciences

Scientific councils of astronomical observatories or astronomical institutes

Scientific councils of corresponding departments of universities

Nominations for Viktor Ambartsumian International Science Prize are not allowed in case if the presented work has already won or at the same time has been presented for another international prize.

### **Necessary documents for nomination**

- 1. Official letter of nomination signed and sealed by the corresponding body,
- 2. Statement of scientific results or achievements, which are being nominated (2 pages),
- 3. Curriculum Vitae of the nominee(s),
- 4. List of refereed publications of the nominee(s),
- 5. Recommendations from three renowned scientists in the field,
- 6. Published papers, books, CD/DVDs, or other works that are being nominated,
- 7. Other documents that might be important for the decision.

#### The documents should be submitted to

Viktor Ambartsumian International Science Prize International Steering Committee, Presidium, National Academy of Sciences, Marshal Baghramyan ave. 24, Yerevan 0019, Republic of Armenia.

Phone: +374-10-525505.

### **Deadline for nominations**

March 18, 2020. The decisions will be made before July 18, 2020 and the Award Ceremony of Viktor Ambartsumian International Science Prize will take place on **September 18, 2020**.

### **Viktor Ambartsumian Prize International Steering Committee**

- Prof. Radik M. MARTIROSYAN (Armenia, Chair, president@sci.am)
- Prof. **Xavier BARCONS** (Germany, xbarcons@eso.org)
- Prof. Jocelyn BELL BURNELL (UK, jocelyn.bellburnell@physics.ox.ac.uk)
- Prof. Anatol CHEREPASHCHUK (Russia, director@sai.msu.ru)
- Prof. Michel MAYOR (Switzerland, michel.mayor@unige.ch)
- Prof. Vahé PETROSIAN (USA, vahep@stanford.edu)
- Prof. **Brian SCHMIDT** (Australia, brian@mso.anu.edu.au)
- Prof. **Joseph SILK** (UK, silk@astro.ox.ac.uk)
- Prof. **Ewine VAN DISHOECK** (Netherlands, ewine@strw.leidenuniv.nl)

### Contact

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**Sona V. FARMANYAN** (Executive Secretary, International Steering Committee, phones: +374-10-525505, +374-55-911307, E-mail: sona.farmanyan@mail.ru, vaprize@sci.am).

### **Previous winners of Viktor Ambartsumian International Prize**

**2010: Michel Mayor** (Switzerland), **Garik Israelian** (Spain) and **Nuno Santos** (Portugal) – for their important contribution in the study of relation between planetary systems and their host stars

**2012: Jaan Einasto** (Estonia) – for his fundamental contributions to the discovery of dark matter and the cosmic web

**Igor Novikov** (Russia) – for his pioneering formulation how to confirm observationally that our Universe started as a hot Universe, and for proposing the method for determination of quasar masses

**2014: Felix Aharonian** (Germany) – for his outstanding contributions to the field of high energy astrophysics and to the physics of cosmic accelerators, and leading role in the development of the stereoscopic system of Cherenkov telescopes

**Igor Karachentsev** (Russia) and **Brent Tully** (USA) – for their fundamental contribution in the cosmology of the Local Universe

2016: was not awarded

**2018:** Edward van den Heuvel (Netherlands), Alexander V. Tutukov (Russia) and Lev R. Yungelson (Russia) – for their pioneering studies of massive binary stars, in particular the formation of relativistic binaries and gravitational-wave sources



# The 5th Face to Face Meeting of OAD Regions



The meeting of the Regional Offices was on January 28-29 at the OAD office in Cape Town. The meeting began by the lunch with OAD Steering Committee. The OAD Steering Committee exercises general oversight of the activities of the OAD and its staff. It comprises 3 members nominated by the International Astronomical Union (IAU) and 3 members nominated by the National Research Foundation (NRF). The Chair of the OAD Steering Committee alternates between a nominee of the IAU and a nominee of NRF. The current OAD steering committee consists of: Saalih Allie, Ajit Kembhavi, Ian Robson/José Miguel Rodriguez Espinosa, Renée C. Kraan-Korteweg (Chair), Bernie Fanaroff, Daniela Lazzaro, Petri Vaisanen (SAAO Director and ex-officio member of Steering Committee)

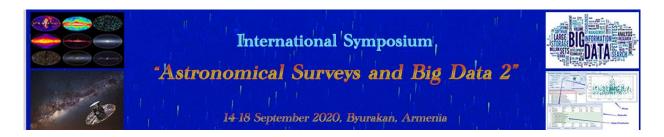
Every 2 years, all the OAD Regions come together for an in-person meeting and review of their plans and activities. This year, the Regions meeting was sandwiched between the Steering Committee meeting and the workshop on Science for Development. Dr. Areg Mickaelian and Gor Mikayelyan were the representatives of South West and Central Asian ROAD.



On January 30-31, the OAD together with the ISC Regional Office for Africa hosted an interdisciplinary workshop on "Science for Development". The workshop generated ideas and plans for interdisciplinary science-for-development projects, which could be incubated/piloted within the OAD or ROA networks, and potentially expanded globally.

Find more at: <a href="http://science4dev.astro4dev.org/?fbclid=lwAR3Avy833Dlqr0vNeO4cxfZ6i-hxbvuL7cm4RwTx7qV3ySL">http://science4dev.astro4dev.org/?fbclid=lwAR3Avy833Dlqr0vNeO4cxfZ6i-hxbvuL7cm4RwTx7qV3ySL</a> 602lWQ6j1Y

# International Symposium Astronomical Surveys and Big Data 2



The International Symposium Astronomical Surveys and Big Data 2 (ASBD-2) will take place on 14-18 September 2020 in the Byurakan Astrophysical Observatory (BAO), Armenia. This will be the 2nd such meeting; we had a very successful meeting ASBD in 2015 with participation of astronomers and computer scientists. We combined astronomers and computer scientists with heavy involvement of astronomical surveys, catalogs, archives, databases and VOs. In addition, on 18 Sep 2020, we expect the Official Award Ceremony of Viktor Ambartsumian International Science Prize 2020.

### **Topics**

- ➤ Historical surveys; Byurakan surveys for active galaxies (Markarian, Arakelian, Kazarian) and others
- Surveys for exoplanets
- Surveys for stars and nebulae
- Extragalactic and cosmological surveys
- Digitization of astronomical data
- ➤ Astronomical Catalogues, Archives and Databases
- Cross-identifications between surveys and discovery of new objects
- Future large-area surveys
- ➢ Big Data in Astronomy
- Data Science
- ➤ Computational Astrophysics, Astrostatistics and Astroinformatics
- Virtual Observatories

### **Scientific Organizing Committee (SOC)**

Areg Mickaelian (Armenia, Chair) Markus Demleitner(Germany) Chenzhou Cui (China) Ajit Kembhavi (India) Andy Lawrence (UK), TBC Ashish Mahabal (USA) Oleg Malkov (Russia) Masatoshi Ohishi (Japan) Fabio Pasian (Italy) Alain Sarkissian (France) David Schade (Canada), TBC

Abstract submission is open from 10 January till 15 May 2020 through our webpage. The typical size of abstracts is 250 words or 1500 characters. Contributed papers and posters will be selected by SOC and the contributors will be notified before 31 May 2020.

### European Journal Astronomy & Astrophysics (A&A) Board of Directors

# A strong A strong A strophysics Board of Directors meeting 14-15.05.2020, Yerevan Armenia

The European Journal Astronomy & Astrophysics (A&A) Board of Directors Annual Meeting 2020 will take place on May 14-15, 2020 at the National Academy of Sciences of the Republic of Armenia (NAS RA) in Yerevan, the capital city of Armenia. On May 13, A&A Executive Committee meeting will be held.

### The Board of Directors

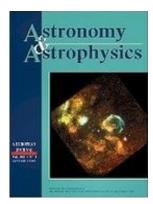
The Members of the Board are appointed by the scientific organizations of the adhering countries. Decides on general publication policy.

Appoints the Editors, who are responsible for deciding what is published in the journal.

Places contracts for the publication of the journal with the help of the ESO.

The procedures of the Board of Directors are defined by the Standing Rules.

### The Board of Directors Annual Meetings



The Editors present the Editors report for the preceding year.

The finances of the Board of Directors for the following year are approved. These include the national contributions paid by the member countries, and the budget for the editorial offices.

The Board of Directors agrees with the publishers the number of pages to be published in the following year. The price per page to be published is specified by the contract with the publisher which is signed every five years. The institutional subscription for the following year is then determined by the number of pages to be published.

### 7th Byurakan International Summer School

### 7th Byurakan International Summer School for Young Astronomers "Astronomy and Data Science"

7-12 September 2020, Byurakan (Armenia)

The 7th Byurakan International Summer School (7BISS) for Young Astronomers will take place on 7-12 September 2020 in the Byurakan Astrophysical Observatory (BAO), Armenia. This will be the 7th school of the series of Byurakan International Summer Schools (BISS) founded in 2006 and being held once every 2 years, one of the most important and regular astronomical summer/winter schools in the world. According to the analysis of the IAU Division C (Education, Outreach and Heritage), BISS is among the top-3 astronomical schools in the world (together with IAU ISYAs and Vatican schools, VOSS), as well as the NEON/OPTICON schools are among the best ones.

This time BISS focuses on Data Science and it is entitled "Astronomy and Data Science", as it will be followed by a Symposium "Astronomical Surveys and Big Data 2" (ASBD-2, 14-18 Sep 2020). During the school the students will have lectures and practical tutorial sessions on Astronomical Surveys, Digitization of astronomical data, Astronomical Catalogues, Databases and Archives, Astrostatistics and Astroinformatics, Big Data in Astronomy and Virtual Observatory tools. The first ASBD in 2015 was very successful with participation of representatives of large surveys, VO projects and computer scientists and we will continue with its update in 2020. Active students that will propose talks for ASBD-2 meeting, will be also invited to participate in it and stay in Byurakan for the second week as well.

### **Main Topics**

- Astronomical Surveys
- Data Reduction and Analysis
- Digitization of astronomical data
- ❖ Astronomical Catalogues, Archives and Databases
- ❖ Big Data in Astronomy
- Data Science
- Astrostatistics and Astroinformatics
- Virtual Observatories

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#### ASTRONOMICAL CALENDAR **March**, 2020 Monday Tuesday Wednesday Thursday Sunday **Friday** Saturday Moon at Conjunction of Neptune **First** Quarter 10 14 15 Conjunction The Moon y-Normid Asteroid 27 of Venus at aphelion Euterpe at meteor and Uranus shower opposition 18 19 20 21 22 Moon at Conjunction Conjunction Venus at The Moon of the Moon of the Moon **Last Quarter** perihelion and Saturn perihelion and Mars March Conjunction equinox of the Moon Conjunction and Jupiter Conjunction of the Moon of Jupiter and and Mars Mercury 23 26 28 Conjunction New Moon Mercury at Conjunction of Mars and aphelion of the Moon Pluto and Venus 30 Conjunction of Saturn and Mars