## **ArAS News**

NEWSLETTER

ARMENIAN ASTRONOMICAL SOCIETY (A r A S)



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## CONTENTS

NON-STABLE UNIVERSE: ENERGETIC RESOURCES, ACTIVITY PHENOMENA AND EVOLUTIONARY PROCESSES  International Symposium, dedicated to the 70th anniversary of Dyunskan Astrophysical Observatory 19-23 September 2016, Yervan-Byurskan, Armenia	1	<b>BAO-70 Anniversary Events</b>	3
FIFTH BYURAKAN INTERNATIONAL SUMMER SCHOOL FOR YOUNG ASTRONOMERS  Dedicated to Byurakan Astrophysical Observatory 76th anniversary  12-23 September 2016, Byurakan (Armenia)	2	The Fifth Byurakan International Summer School for Young Astronomers	4
38th International School for Young Astronomers 21 August - 8 September Tehran, Iran  The Norwegian Academy of Science and Letters	3	ISYA 2016 in Iran	5
	4	Release of EAAS Astrocourier September Issue	6
<b>YAU</b>	5	Release of IAU Astronomy Outreach Newsletter 2016 #18, September #2	7
National Radio Astronomy Observatory  A facily of the National Science Foundation  Volume 9, Issue 8  CNCWS  15 September 2016	6	Release of NRAO September Issue	8
Amiversaryl	7	Anniversaries: Vahe Oskanian – 95, Misak Eritsian – 80	9-10
LINEAR PLANS.  CONTROLL RIPS.  1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8	Lunar Phases of October	11
	9	October Calendar of Astronomical Events	12

### **BAO-70 ANNIVERSARY MEETING**



A meeting "Non-Stable Universe: Energetic Resources, Activity Phenomena and Evolutionary Processes" dedicated to the 70<sup>th</sup> anniversary of Byurakan Astrophysical Observatory (BAO) was held on 19-23 September 2016 in Yerevan and Byurakan, Armenia. A number of outstanding scientists, astronomers having tight relations to BAO, representatives of regional countries with an involvement of BAO traditional research areas related to instability phenomena in the Universe, both observational and theoretical were invited to the symposium.

There were 76 participants from 17 countries (Armenia, Belarus, China, Estonia, France, Georgia, Germany, Iran, Ireland, Italy, Portugal, Russia, Spain, Turkey, Ukraine, USA and Uzbekistan) and 15 invited speakers: Vardan Adibekvan (IA, Portugal), Victor Afanasiev (SAO, Russia), Georges Alecian (OBSPM, France), Noreta Andreasyan-Thomas (UVI, USA), Ivan Andronov (ONMU, Ukraine), Ara Avetisyan (YSU, Armenia), Jerome Bouvier (IPAG, France), Grigor Broutian (BAO, Armenia), Pantea Davoudifar (RIAAM, Iran), Richard De Grijs (KIAA-PKU, China), Massimo Della Valle (OACN, Italy), Serguei Dodonov (SAO, Russia), Jan Einasto (Tartu, Estonia; will be presented by Tonu VIIK), Konstantin Grankin (CrAO, Ukraine), Vladimir Grinin (SPbSU, Russia), Valeri Hambaryan (Jena, Germany), Haik Harutyunian (BAO, Armenia), Alisher Hojaev (NUU/UBAI, Uzbekistan), Garik Israelian (IAC, Spain), Edward Khachikian (BAO, Armenia), Habib Khosroshahi (IPM, Iran), Nino Kochiashvili (AAO, Georgia), Alex Lazarian (UWM, USA), Oleg Malkov (INASAN, Russia), Areg Mickaelian (BAO, Armenia), Tigran Movsessian (BAO, Armenia), Rezo Natsvlishvili (AAO, Georgia), Elena Nikoghosyan (BAO, Armenia), Arthur Nikogossian (BAO, Armenia), Hovhannes Pikichyan (BAO, Armenia), Boris Shustov (INASAN, Russia), Maya Todua (AAO, Georgia), Massimo Turatto (Padova, Italy), Valeri Vlasyuk (SAO, Russia) and Ararat Yeghikyan (BAO, Armenia).

The Symposium has contributed to the following:

- Instability phenomena in the Universe
- Active Sun and formation and evolution of the Solar System
- Exoplanets and brown dwarfs
- Stars, nebulae and interstellar medium
- Galaxies, quasars and cosmology
- Energetic resources of activity phenomena and evolutionary processes

## FIFTH BYURAKAN INTERNATIONAL SUMMER SCHOOL FOR YOUNG ASTRONOMERS

## FIFTH BYURAKAN INTERNATIONAL SUMMER SCHOOL FOR YOUNG ASTRONOMERS

Dedicated to Byurakan Astrophysical Observatory 70th anniversary 12-23 September 2016, Byurakan (Armenia)

The Fifth Byurakan International Summer School dedicated to Byurakan Astrophysical Observatory's 70th Anniversary took place in Byurakan Astrophysical Observatory on 12-23 September, 2016. Lectures were given by experienced scientists and observers, covering a range of topics from Ground-based Telescopes to Modern Observational Techniques. The students were also given chance to give a short oral presentations. All the local expenses were covered by the organizers and limited travel grants were offered. The participants of the school also participate to the Meeting dedicated to Byurakan Astrophysical Observatory 70<sup>th</sup> Anniversary.

There were 27 students from 6 countries (Armenia, Georgia, Iran, Russia, Turkey and Ukraine) and 15 lecturers: Vardan ADIBEKYAN (CAUP, Portugal), Noreta ANDREASYAN-THOMAS (UVI, USA), Richard DE GRIJS (PKU-KIAA, China), Serguei DODONOV (SAO, Russia), Valery HAMBARYAN (Jena, Germany), Haik HARUTYUNIAN (BAO, Armenia), Alisher HOJAEV (UBAI, Uzbekistan), Nino KOCHIASHVILI (AAO, Georgia), Tigran MAGAKIAN (BAO, Armenia), Areg MICKAELIAN (BAO, Armenia), Tigran MOVSESSIAN (BAO, Armenia), Elena NIKOGHOSYAN (BAO, Armenia), Artur NIKOGOSSIAN (BAO, Armenia), Martin TOPINKA (DIAS, Ireland) and Ararat YEGHIKIAN (BAO, Armenia)

The previous Byurakan International Summer Schools were held in 2006, 2008, 2010 (the last one combined with the IAU ISYA-2010), 2012 and each time attracted several dozens of students from Albania, Czech Republic, Egypt, France, Georgia, Germany, Greece, Hungary, India, Iran, Italy, Jordan, Lithuania, Poland, Romania, Russia, Serbia, Spain, Turkey, Ukraine, and Armenia. Famous scientists from the USA (Daniel Weedman, Robert Williams, Lev Titarchuk, Kam-Ching Leung, Leslie Sage, Don Barry), Germany (Dieter Engels, Lutz Wisotzki, Tigran Arshakian), France (Daniel Kunth, Michel Dennefeld, Gary Mamon, Georges Alecian, Philippe Prugniel, Alain Sarkissian, Mustapha Meftah), Italy (Massimo Turatto, Corinne Rossi, Riccardo Claudi), Spain (Garik Israelian), Belgium (Jean-Pierre De Greve), Russia (Gennady Bisnovatyi-Kogan, Sergei Dodonov, Igor Chilingarian, Aleksei Moiseev), Australia (John (Hovhannes) Sarkissian), Dr. Georges Alecian (OBSPM, France), Estonia (Jaan Einasto), USA (Richard Lovelace), India (Jayant Narlikar), Russia (Igor Novikov) and USA (Yervant Terzian) as well as Byurakan Astrophysical Observatory, Yerevan State University (YSU), Yerevan Physics Institute (YerPhI) scientists Areg Mickaelian, Tigran Magakian, Tigran Movsessian, Elena Nikogossian, Ashot Chilingarian, Artashes Petrosian, Haik Harutyunian, Lusine Sargsyan, and Avetis Sadoyan have been the lecturers.

### ISYA 2016 IN IRAN



The 38th International School for Young Astronomers was held in Tehran from 21 August to 8 September, 2016. The school was organised jointly by the International Astronomical Union (IAU), School of Astronomy at the Institute for Research in Fundamental Sciences (IPM), the Norwegian Academy of Science and Letters and Astronomical Society of Iran. The aimed at bringing together enthusiastic students from the region and distinguished lectures from around the world for a 3 weeks event involving advanced lecture and hands on workshop on observational astronomy.

Among the topics discussed in the event were:

- Structures and Evolution of Galaxies
- Galaxy systems
- Inter-Stellar Medium
- Planet Formation and Exoplanets
- Observational Techniques
- Data Reduction and Analysis

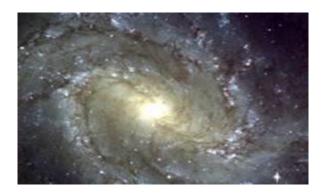


40 students attended the event from Afghanistan, Azerbaijan, India, Iran, Jordan and Russia. Lectures included Itziar Aretxaga (Mexico), Sudhanshu Barway (South Africa) Coryn Bailer-Jones (Germany), Michel Dennefeld (France), Edward Guinan (USA), Ajit Kembhavi (India), Habib Khosroshahi (Iran), Eric Lagadec (France), Kam-Ching Leung (USA), Xiaowei Liu (China), Sohrab Rahvar (Iran) and Yogesh Wadadekar (India), who delivered around 40 lectures. In addition 6 tutors assisted students with their projects. The 38th ISYA was one of the most advanced schools conducted by the IAU. In the opening ceremony Prof S. Nasiri the Secretary-General of the Iranian National Commission for UNESCO made a presentation on astronomy heritage in Iran.

The school was hosted by School of Astronomy at the Institute for Research in Fundamental Sciences (IPM) in Tehran. IPM's School of Astronomy is the largest institution for Astronomy and Cosmology in Iran. The Iranian National Observatory is also hosted by IPM.

Dr. Habib Khosroshahi Head of ISYA 2016 School

## RELEASE OF ASTROCOURIER SEPTEMBER ISSUE



#### **CONTENTS**

#### **PREFACE**

- Two Sources and Three Component Parts of Autumnal Equinox holiday in GAISh.
- Problem of Extraterrestrial Civilizations
- The 100<sup>th</sup> Anniversary of I.S. Shklovskaya

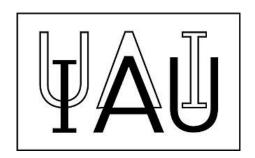
#### Afterword to the Jubilee Conference

- Academician Kardashev: "We are on the threshold of amazing discoveries in astronomy"
- Astronomy will be returned in Russian school
- 145<sup>th</sup> Anniversary of Odessa Astronomical Observatory
- 16<sup>th</sup> Kiev International Conference Gamow-School Results
- 70<sup>th</sup> Anniversary Byurakan Astrophysical Observatory invited to the conference
- Modern Cosmology and Gravitational-Wave Astronomy (to the memory L.P. Grishchuk)
   Moscow, GAISH MGU, 16-18 November 2016
- The 3rd PanRussian Astronomical Conference "Heaven and Earth" November 22-24, 2016
   Irkutsk

Astrocourier Newsletter is available in the following link:

http://www.sai.msu.ru/EAAS/rus/astrocourier/300616.htm

# RELEASE OF IAU ASTRONOMY OUTREACH NEWSLETTER 2016 #18, September #2



In this newsletter:

From the Editors

National Outreach Contact (NOC) Corner: News from Portugal

Beyond Cosmic Light: Science Opera continues its legacy in 2016

Launch of the IYL 2015 Final Report

Gaia First Star Map

New Free Planetarium Products from ESO

NASA Launches New Citizen Science Opportunity

Universe Awareness (UNAWE) newsletter

Education, communications and outreach opportunities at CERN

Meetings & global events

**Important Dates** 

Upcoming

IAU Astronomy Outreach Newsletter in other languages

Contributions to IAU Outreach Newsletter for 2016



## RELEASE OF NRAO NEWSLETTER SEPTEMBER

## National Radio Astronomy Observatory A facility of the National Science Foundation



- Metrology and Control of Large Telescopes
   Sep 19 24, 2016 | Green Bank, WV
- Half a Decade of ALMA: Cosmic Dawns Transformed
   Sep 20 23, 2016 | Indian Wells, CA
- Breakthrough Listen North American Community Workshop
   Oct 5 6, 2016 | Green Bank, WV
- Coexisting with Radio Frequency Interference
   Oct 17 20, 2016 | Socorro, NM
- 2016 Jansky Lecture
   Oct 27, 2016 | Charlottesville, VA
- 2016 Jansky Lecture
   Nov 4, 2016 | Socorro, NM
- NRAO Town Hall at the Jan 2017 AAS Meeting Jan 6, 2017 | Grapevine, TX
- 2017 Jansky Fellow Program Announcement
- Long Baseline Observatory Launch
- Green Bank Observatory Launch
- Breakthrough Listen Workshop
- The GBT Observing Tool Astrid
- ALMA Program News

### OSKANIAN'S 95<sup>TH</sup> ANNIVERSARY



Dr. Vahe Oskanian is one of the benefactors of Armenian astronomy. He is simultaneously known both as one of the most outstanding astronomers of Yugoslavia and as one of the leaders of one of the most important directions of the Byurakan Astrophysical Observatory; the investigation of variable stars. Vahe Oskanian's scientific activity is a distinguished example of development of science when in the result of lack of knowledge an opinion and a theory are formed, but the initial viewpoint is denied due to consistent work and addition of knowledge ceding new notions. Vahe Oskanian was born on September 2, 1921 in Belgrade, Yugoslavia. Here he finished school and gymnasium. In

1940 Oskanian entered the Electrotechnical Department of the Belgrade University, but the World War II broke out, and Yugoslavia was occupied by the Germans, in correspondence of which all higher educational institutions were closed. Since 1946, after the end of the war, changing the department, he continued his study at the Department of Astronomy of the Faculty of Mathematics of the Belgrade University, which he graduated in 1949. In parallel, since 1945 he worked at the Belgrade Observatory by public order, and since 1948 he became a constant worker of the Observatory. In August, 1949, graduating from the University, Oskanian was enlisted to the Yugoslav Army and in December, 1950, completing the service, he returned to his work at the Department of Double and Variable Stars of the Belgrade University. He made his first observations with the help of Graph visual photometer. Then he undertook the making of a new high sensitivity electrophotometer-polarimeter for observations of stars. At the same time he took part in Observatory works of services of the activity of the Sun and the occultation of stars by the Moon. The works that Vahe Oskanian published in 1946-1953 are mainly devoted to these fields. Since 1952 on Oskanian's initiative the group of investigation of variable stars was separated. Its aim was to investigate newly revealed stars of UV Ceti type and red dwarf stars displaying flare activity. Using his own made electrophotometer-polarimeter for this purpose, in 1952-1953 the largest flares, ever observed on UV Ceti Star, were registered. In 1955 Oskanian became an IAU member. In 1956-1957 with an intention of collaboration he worked and refined at the Byurakan Observatory. In 1960 he founded the department of astrophysics of the Belgrade Observatory, which he headed until 1966. In 1961 Oskanian defended a doctorate thesis on the topic "Variable Stars of UV Ceti Type". Since 1964 he professed at the Department of Astrophysics of the faculty of mathematics of Belgrade University. In 1964 and in 1965 he was elected the Head of the Belgrade Observatory; at the same time he was the Editor-in-Chief of the periodicals "Bulletin of the Belgrade Observatory" and "Publications of the Belgrade Observatory". In 1966 Oskanian moved to Armenia with his family and continued his work at the laboratory of electrophotometry of BAO, which he headed from 1970 to 1986. In 1970-1980 he professed the professional course of practical astrophysics, electro-photometry at the Chair of Astrophysics of the YSU Department of Physics. In 1986 he moved from BAO to All-Union Institute of Radiophysical Measurements, where he held the post of the head of the Department of Astrophysics. Since the Belgrade Observatory had an astrometric bias, naturally most of the early works of Oskanian's scientific activity were also astrometrical, except the investigations of the activity of the Sun. But he was more interested in astronomical problems, particularly those years newly revealed red dwarf stars displaying flare activity, and after a short time he started investigating those stars. These stars, which were called flare stars, later became the main subject of Oskanian's scientific activity. The classification of flares of stars according to the brightness and duration of the flare belongs to him. His further investigations indicated that such flares took place on other stars as well (not only on red dwarf stars), and the flares of all those stars, as well as the flares of the Sun, had the same nature. The year of professionalization spent at the Byurakan Observatory had a special significance in

Oskanian's scientific life. It was stimulation for founding a department of astrophysics in the Belgrade Observatory; due to its works the observatory changed its main scientific direction. In 1953-1962 Oskanian had an active role in the popularization of the astronomy in Yugoslavia, gave numerous lectures and published 23 popular scientific articles in different periodicals. Giving importance to the observational astronomy, he was interested in the problems of increasing the efficiency of observations, as well as the problems of getting utmost information from measurements, in other words the use of information theory in astronomical observations, which allows estimate the obtained information, and based on this to organize the measurements so that the informativity of obtained material will be maximum. The results of those investigations were summarized in a number of articles. During the last years of his life he was particularly interested in the problem of description of polarized light. The comprehensive statistical working out of numerous, accurately made measurements indicated that against the existing opinion that the polarization of light was described only by wave nature of the light; in fact it is more accurately introduced by a quantum approach. Unfortunately, those works were not completed because of his early death. The results of his scientific activity were summarized in various periodicals and books published in 87 articles. Vahe Oskanian passed away in January 1989 in Yerevan.

### ERITSIAN'S 80<sup>TH</sup> ANNIVERSARY



Recently *Dr*. Misak Eritsian celebrated his 80<sup>th</sup> anniversary. Misak Hakob Eritsian was born on September 15, 1936 in village Ujan, Ashtarak District, Armenia. He got his higher education at the Yerevan State University (YSU), Department of Physics, taking M.Sc. degree in Astrophysics in 1958. Since 1960 he worked at the Byurakan Astrophysical Observatory; first as a Junior Research Associate, and since 1986, as a Research Associate. In 1981 he defended his Ph.D. thesis in Astrophysics at Byurakan Astrophysical Observatory (supervisors: Karlos Grigorian and Vahe Oskanian). His main research fields are variable stars: UV Ceti, T

Tau, Mira Ceti, Herbig Ae/Be type stars, H-alpha objects, etc. Eritsian has published some 40 papers with the results of his studies.

## LUNAR PHASES OF OCTOBER



## OCTOBER CALENDAR OF ASTRONOMICAL EVENTS

