## **ArAS News**

# NEWSLETTER OF THE ARMENIAN ASTRONOMICAL SOCIETY (A r A S)

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## **CONTENTS:**

1.	IAU XXVIII General Assembly in Beijing	2
2.	JENAM/EWASS-2012 in Rome	3
3.	EAAS XI Annual Meeting in Moscow	4
4.	42 <sup>nd</sup> SAAS-FEE Course in Switzerland	5
5.	ArAS public lectures at schools	5
6.	Anniversaries: Misha Kazarian – 80	6
	Vigen Malumian – 80	7
	Karine Sahakian – 75	7

The ArAS Newsletter in the INTERNET: <a href="http://www.aras.am/ArasNews/arasnews.html">http://www.aras.am/ArasNews/arasnews.html</a>

## IAU XXVIII GENERAL ASSEMBLY in BEIJING



The International Astronomical Union (IAU) XXVIII General Assembly (GA) will be held on **August 20-31**, **2012** in **Beijing**, **China**. In August 2012 China will for the first time host the IAU GA in Beijing. This triennial gathering of astronomers from around the world to discuss and debate the most recent discoveries about the universe is an important part of the vitality of astronomy. The venue of the Beijing GA will be the new China National Convention Center that is housed in the Olympic Park in a beautiful, spacious building and area that is full of amenities for conference participants and visitors. GA participants will have an opportunity to experience the wide range of astronomical activities now taking place in China that include new projects, facilities, and institutes. They will also report on, hear and discuss the latest research results from every field of astronomy.

The General Assembly will have 4 Invited Discourses, 8 IAU Symposia, 18 Special Sessions, 7 Joint Discussions, and Special Lunchtime Lectures. The following meetings are included in the program:

## **IAU Symposia**

IAU S288 Astrophysics from Antarctica

IAU S289 Advancing the physics of cosmic distances

IAU S290 Feeding compact objects: Accretion on all scales

IAU S291 Neutron stars and pulsars: Challenges and opportunities after 80 Years

IAU S292 Molecular Gas, Dust, and Star Formation in Galaxies

IAU \$293 Formation, detection, and characterization of extrasolar habitable planets

IAU S294 Solar and astrophysical dynamos and magnetic activity

IAU S295 The intriguing life of massive galaxies

#### **Special Sessions**

SpS1 Origin and complexity of massive star clusters

SpS2 Cosmic evolution of groups and clusters of galaxies

SpS3 Galaxy evolution through secular processes

SpS4 New era for studying interstellar and intergalactic magnetic fields

SpS5 The IR view of massive stars: the main sequence and beyond

SpS6 Science with large solar telescopes

SpS7 The impact hazard: current activities and future plans

SpS8 Calibration of star-formation rate measurements across the electromagnetic spectrum

SpS9 Future Large Scale Facilities

**SpS10** Dynamics of the star-planet relations

SpS11 IAU Strategic Plan and the Global Office of Astronomy for Development

SpS12 Modern views of the interstellar medium

SpS13 High-precision tests of stellar physics from high-precision photometry

SpS14 Communicating astronomy with the public for scientists

**SpS15** Data intensive astronomy

**SpS16** Unexplained spectral phenomena in the interstellar medium

SpS17 Light Pollution: Protecting Astronomical Sites and Increasing Global Awareness through Education

SpS18 "Hot Topics" for each week 24 August & 31 August

#### **Joint Discussions**

JD1 The highest-energy gamma-ray universe observed with Cherenkov telescope arrays

JD2 Very massive stars in the local universe

JD3 3-D views of the cycling Sun in stellar context

JD4 Ultraviolet emission in early-type galaxies

JD5 From meteors and meteorites to their parent bodies: Current status and future developments

JD6 The connection between radio properties and high-energy emission in AGNs

JD7 Space-time reference systems for future research

For the details, please visit the IAU GA web site, which is available at <a href="http://www.astronomy2012.org/dct/page/1">http://www.astronomy2012.org/dct/page/1</a>

## JENAM/EWASS-2012 in ROME



The European Week of Astronomy and Space Science (EWASS), formely known as JENAM (Joint European and National Astronomical Meeting) in 2012 will take place in Rome, Italy, at the Pontificia Università Lateranense, on 1-6 July. EWASS 2012 will host 11 plenary talks, 10 Symposia, 12 Special Sessions, and 6 Special Meetings on various aspects of modern astronomy. The conference will address a wide range of topics in Astronomy and Space Sciences and related technologies, that are of interest to the European astronomical community. The EAS Council meeting, Tycho Brahe Prize and Woltjer Lecture will also take place during EWASS 2012. The following meetings are included in the program:

#### **EWASS Symposia**

**Symposium 1:** Molecular gas in high-z galaxies

Symposium 2: The astrochemical universe unveiled with Herschel

**Symposium 3:** Gas for cosmology in the nearby Universe

Symposium 4: The Galactic Plane reloaded: a brand new MultiwaveIngth Milky Way from TeV to MHz

Symposium 5: Gaia Research for European Astronomy Training: GREAT Network Science Symposium

Symposium 6: Stellar Populations 55 years after the Vatican Conference

**Symposium 7:** Theory and observations of Core-Collapse Supernovae: from the explosion mechanism to the building up of the remnant; an update of what is being done in Europe

Symposium 8: The Sun: new tools and ideas in observational solar astrophysics

Symposium 9: Astronomy education in Europe

Symposium 10: 30 years of Italian participation to ESO

#### **EWASS Special Sessions**

SpS1: Cosmic reionization: updating physical scenarios

SpS2: Use of gravitational lensing to study distant galaxies

SpS3: The picture of galaxy evolution painted with Lyman alpha

SpS4: Structure of galaxy disks shaped by secular evolution and environmental processes

SpS5: Morphology and kinematics of interacting galaxies

SpS6: The European Extremely Large Telescope

SpS7: The build up of the red sequence

SpS8: ASTRO-H: High-energy Astrophysics with the Next-Generation X-ray Observatory

SpS9: Formation and disruption of jets in black-hole binaries and AGNs

SpS10: Scientific and technological challenges in the study of Solar System origin

**SpS11:** From solar physics to astrophysics: the Sun as Rosetta stone for understanding astrophysical processes

**SpS12:** Long-term preservation... from the stars? File format assessment and technical issues in preservation projects for cultural resources

#### **EWASS Special Meetings**

**SM1:** EAS Council Meeting (private)

SM2: GREAT Meeting SM3: Astronet Meeting SM4: SAlt Meeting

**SM5:** Europlanets Nodes Meeting (private) **SM6:** EPO GTTP training session (for teachers)

For the details, please visit the IAU GA web site, which is available at <a href="http://www.ifsi-roma.inaf.it/ewass2012/">http://www.ifsi-roma.inaf.it/ewass2012/</a>

## EAAS XI ANNUAL MEETING in MOSCOW

The Euro-Asian Astronomical Society (EAAS) XI meeting will take place on May 28 – June 1, 2012 in Moscow, Russia. At the same time, a scientific conference "Astronomy of the Information Burst: Results and Problems" will take place. The venue is M.V. Lomonosov Moscow State University (MSU) and P.K. Sternberg State Astronomical Institute (SAI). The program includes:

- 1. Report on the EAAS Council activities for 2008–2012
- 2. Report of the EAAS Financial Board
- 3. Election of the EAAS Co-Chairpersons
- 4. Election of the EAAS Council Board
- 5. Election of the EAAS Financial Board

The conference "Astronomy of the Information Burst: Results and Problems" will include plenary meetings with invited leading scientists' lectures on: problems and prospects of astronomical investigations during the information revolution; intensification of work on the world virtual observatory; wide use of all-sky multi-wave robotized surveys; new computer techniques of detection of astrophysical objects with further, more thorough studies; new Russian space projects.

Besides, a number of sections on different branches of the astronomical knowledge and astronomical education will be held.

## **Optional Sections**

- The Sun
- Stars, Planetary Systems and Interstellar Medium
- Astrometry and Celestial Mechanics
- Virtual Observatories
- Extragalactic Astronomy
- Astronomical Education and Propagation of the Astronomical Knowledge

The 3rd conference of "Modern Stellar Astronomy" conference series is included into the main conference program as another section.

For the details, please visit the IAU GA web site, which is available at <a href="http://www.sai.msu.su/EAAS/eng/conf/l\_ann\_eng.htm">http://www.sai.msu.su/EAAS/eng/conf/l\_ann\_eng.htm</a>

## 42<sup>nd</sup> SAAS-FEE COURSE in SWITZERLAND



On March 26-31, the 42<sup>nd</sup> SAAS-FEE Course organized by the Swiss Society for Astrophysics and Astronomy (SSAA) took place in Villars-sur-Ollon, Switzerland. This course is being taken place annually since 1971, sponsored every year by the Swiss Academy of Sciences (SCNAT). The topic of the SAAS-FEE Course 2012 was "Dynamics of Young Star Clusters & Associations", mainly Theory of Star Formation and Dynamical Evolution of Stellar Systems, Kinematics of Star Clusters and Associations, Modes of Star Formation. The lecturing program on general issues was taught by invited lecturers *Prof.* Cathie Clarke (Institute for Astronomy, University of Cambridge, UK), *Prof.* 

Robert Mathieu (Department of Astronomy, University of Wisconsin, USA), *Dr.* I. Neill Reid (Head of Science Mission Office, (Hubble) Space Telescope Science Institute, Baltimore, USA). Course started with a guest lecture by Timo Prusti (European Space Agency) and finished with students' discussions. There were about 50 participants from different countries: Armenia, Australia, Denmark, France, Germany, Italy, Japan, Lithuania, Netherlands, Spain, Switzerland, Turkey, UK and USA. From Armenia, Gohar Harutyunyan, M.Sc. student of the Yerevan State University (YSU) participated. The sponsors of the 42<sup>nd</sup> SAAS-FEE Course were SSAA, SCNAT and Institute for Astronomy of ETH, Zurich.

### ArAS PUBLIC LECTURES at SCHOOLS



To promote science education through astronomy, ArAS organizes "The Armenian Astronomical Society Lectures in Schools", a program where astronomers make presentations in schools sponsored by ArAS. The first ten lectures will take place this year and will be supported by ArAS Co-President *Prof.* Yervant Terzian who is going to support ten lectures annually.

The Byurakan Astrophysical Observatory (BAO) and other astronomers will give these lectures, including Ph.D. students and young scientists. Following topics will be covered:

- Viktor Ambartsumian: his life and scientific activities
- The Byurakan Astrophysical Observatory
- · Solar System: the Sun and its family
- Extrasolar planets: search for habitable worlds
- Stars and nebulae
- The world of galaxies
- Our expanding Universe
- Extraterrestrial civilizations
- Constellations and mythology
- · Calendar and chronology
- Ancient Armenian astronomy
- Astronomy and astrology

Other topics may also be included. The lecturers will receive small honoraria for these activities. ArAS looks for more sponsors to enhance this program with many more public lectures at schools and other institutions.

*Prof.* Yervant Terzian himself will give a public lecture "The Magnificent Universe" in September this year.

## **ANNIVERSARIES**



**Misha KAZARIAN** – **80.** *Prof.* Misha Aristakes Kazarian, one of the most famous Armenian astronomers working in the field of extragalactic astronomy, the author of Kazarian galaxies, recently celebrated his 80<sup>th</sup> anniversary. *Prof.* Kazarian was born on 5.03.1932 in Maralik, Armenia. He graduated from the Yerevan State University (YSU) Chair of Astrophysics in 1958 and worked at the Byurakan Astrophysical Observatory (BAO) in 1958-1980. In 1968 he defended his Ph.D. thesis under the supervision of *Prof.* Grigor Gurzadyan and in 1990 he was awarded the scientific degree of Doctor of Science. Since

1968, Kazarian works at the YSU, Chair of Astrophysics, at the beginning as a lecturer and later, since 1990, as a Professor. Since 1994 he was the Head of the Chair of Astrophysics. From 1980 to 1990 he was the Head of the observational station of artificial satellites of the YSU. Currently he is a professor at YSU Chair of General Physics and Astrophysics. His research is devoted to various studies of Hα stars, cometary nebulae, and galaxies with UV excess (UVX). He has published more than 100 papers in Astrophysics, Commun. of BAO and Astrophys. J., presented a number of talks at different international scientific meetings. 706 UVX galaxies have been catalogued, known as Kazarian galaxies. 120 of these objects have been studied photometrically and spectroscopically by Kazarian et al. at the BAO 2.6m and Special Astrophysical Observatory (SAO, Russia) 6m telescopes. More than 44 years Kazarian works at the YSU, he has lectured a number of courses and has contributed significantly in preparation of many Armenian astronomers. He has been the scientific supervisor for a number of Ph.D., M.Sc. and B.Sc. theses. *Prof.* Kazarian is a member of the International Astronomical Union (IAU), European Astronomical Society (EAS) and Armenian Astronomical Society (ArAS, 2001).



**Vigen MALUMIAN – 80.** *Prof.* Vigen Haik Malumian, one of the most famous radioastronomers at the Byurakan Astrophysical Observatory (BAO), recently celebrated his 80<sup>th</sup> anniversary. *Prof.* Malumian was born on March 11, 1932 in Yerevan, Armenia. In 1954 he graduated from the Yerevan State University (YSU) Chair of Astrophysics. In 1963 he defended his Ph.D. theses under the supervision of *Prof.* S. Khaykin and in 1991 he was awarded the scientific degree of Doctor of physical-mathematical sciences. More than half a century *Prof.* Malumian works at BAO. Currently he is a leading scientific researcher

(since 1995) of BAO. For long years he was a member of the Scientific Council and Specialized Council (Council for Scientific Degrees) of BAO and lectured at the YSU, since 1995 he is a Professor and has contributed significantly in preparation of Armenian astronomers as well. *Prof.* Malumian's main research interests include investigations of isolated and double galaxies, groups of galaxies, radio galaxies, quasars and other radio sources in both radio and other wavelengths ranges, as well as the study of radio properties of Markarian and spiral galaxies. On these and some other scientific topics he has published more than 85 papers, presented a number of talks at different international scientific meetings. *Prof.* Malumian is a member of IAU (since 1997), EAS, one of the founding members of ArAS (1999).

Karine SAHAKIAN – 75. *Dr.* Karine Anushavan Sahakian was one of the best astronomers-observers at the Byurakan Astrophysical Observatory (BAO) working in the field of extragalactic astronomy. She was born on March 15, 1937. In 1958 she graduated from the Yerevan State University (YSU) Chair of Astrophysics and started working at the Byurakan Astrophysical Observatory (BAO). In 1972 she defended her Ph.D. theses under the supervision of *Prof.* V.A. Ambartsumian. She was a senior research associate at BAO. Her main research field was extragalactic astronomy and the research interests were photometric and spectroscopic studies of Markarian galaxies, especially their central structure, as well as stellar associations and superassociations in galaxies. She made a lot of observations with the Byurakan telescopes, particularly the largest one, 2.6m telescope. *Dr.* Sahakian was an author of several dozens of scientific papers and a book *"Manual of young astronomer"* (Yerevan 1969, in Armenian). She passed away in 1993.