# **ArAS News**

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### MICHEL MAYOR'S VISIT TO ARMENIA



Prof. Michel G.Mayor, is the co-discoverer with Didier Queloz, of the first extrasolar planet orbiting a sun-like star, 51 Pegasi (Nature, 2005), and with his team, has discovered about 200 additional planets and planetary systems. These discoveries have revealed the impressive diversity of exoplanet orbital properties. After studying Physics at Lausanne University, Mayor obtained his Ph.D in Astronomy (1971) at Geneva University. His thesis was devoted to the study of the influence of galactic spiral structure on the kinematical properties of stars in the solar vicinity. His research interests include galactic structure and kinematics, globular cluster dynamics, the statistical properies of binary stars and extrasolar planets. From 1998 to 2004, he was Director of the Geneva Observatory. Dr.Mayor is Principal Investigator on the High Accuracy Radial velocity Planetary Search (HARPS) spectrograph project, which, since 2003, has conducted radial velocity searches for

extrasolar planets at the European Southern Observatory's 3.6 meter telescope at La Silla, Chile. The HARPS survey has permitted the discovery of a rich population of low-mass planets orbiting solar-type stars. A few of these super-earths have masses as small as twice the mass of the Earth or smaller. Michel Mayor, in a close collaboration with Dr.G.Israelian and Dr.N.Santos has studied the relationship between exoplanets and their host stars. And together with this team they are the winner of Viktor Ambartsumian International Science Prize. Embassy of Switzerland in Armenia with the collaboration of the Byurakan Astrophysical Observatory invited Prof. Mayor to Armenia and organized a number of events for the celebration of his 75<sup>th</sup> Anniversary. Events included the public lecture of Prof Mayor, scientific seminar at Byurakan Astrophysical Observatory and visit to Space Museum.

On May 31, was organized the workshop "Exoplanets and Astrobiology" at the National Academy of Sciences of the Republic of Armenia, which is the first meeting in Armenia on these subjects. The first exoplanet was discovered by Prof. Michel Mayor in 1995 and many thousands have been discovered and characterized during the next 22 years. At present, there are more than 3600 known exoplanets, many having sizes and masses not very much differing from the Earth, which means that we are at the threshold of the discovery of our twin planet. Astrobiology is one of the most attractive interdisciplinary sciences directly related to exoplanets, as they are the main source for future discoveries related to extraterrestrial life. However, astrobiology also deals with the possible origin of life on planets and therefore it is also related to the origin of the life on the Earth, with the behavior of various organisms in the cosmic environment, with the search of organic matter and organisms on other bodies of the Solar System and elsewhere. There is a number of international organizations,

conferences and journals related to Exoplanets and Astrobiology. The idea of the Workshop is to give more importance to these modern areas of studies and develop these fields in Armenia involving astronomers and biologists for further collaboration. The Workshop is dedicated to Michel Mayor's 75th anniversary and is attached to his visit to Armenia. It will start with Michel Mayor's public lecture and then a number of talks by astronomers and biologists are planned. The Workshop will be also useful for the students interested in these rapidly growing fields.



## **EWASS 2017 and Armenians Participation**



The European Week of Astronomy and Space Science (EWASS, formerly JENAM) is the annual meeting of the European Astronomical Society (EAS). EWASS 2017 was held in Prague, Czech Republic, which already hosted JENAM 1998 and JENAM 2006, the latter as part of the IAU General Assembly. The conference is expected to welcome around 1000 astrophysicists from all over Europe and even beyond.

A number of scientific meetings and other sessions and events were held during EWASS-2016, including 16 symposia, 22 special sessions, 7 plenary lectures and 5 prize award talks and EAS General Assembly.

From Armenia, six astronomers took part; BAO Director and ArAS Co-President Dr. Areg Mickaelian, BAO Deputy Director Tigran Movsissian, BAO Junior Researches Anahit Samsonyan, Arpi Karapetyan, Sona Farmanyan and Lilit Barkhudaryan. In addition, Armenian astronomer Vardan Adibekyan working in Centro de Astrofisica da Universidade do Porto, Portugal took part to the meeting.



Areg Mickaelian also participated in EAS Council Meeting with EAS Affiliated Societies. Many discussions were held, including those with the chairs, leaders or representatives of the European astronomical and space organizations.

## **STARMUS 2017 Festival**



Since the very first Homo Sapiens looked up at a star-filled sky we have been awestruck by the vastness of the cosmos. Even today we remain humbled by the sheer immensity of space, especially as through our progress in physics and astronomy, we are now aware of the tremendous distances involved – even to our closest neighbouring stars. Created by Garik Israelian, researcher at the Institute of Astrophysics of the Canary Islands (IAC), the Starmus Festival is a combination of science, art and music that has featured presentations from Astronauts, Cosmonauts, Nobel Prize Winners and prominent figures from science, culture, the arts and music. It's an astronomical and artistic experience that will enhance your perception of your place in the Universe and change your life forever!



Starmus was encouraged, blessed and powered by Brian May, Alexei Leonov and Stephen Hawking. Their spirit is lying in the foundations of this festival. Starmus IV was very special and different from the previous three editions, which were organized in the Canaries. This year from Armenia Dr. Areg Mickaelian participated to the festival.

# MY UNIVERSE THE 2<sup>ND</sup> CONTEST WINNERS IN BAO



18-20.07.2017, Byurakan, Armenia

The Armenian Astronomical Society (ArAS) and the Fund for Armenian Relief organized "My (FAR) jointly Universe" essay contest for pupils of 8-12 grades from Tavush Province Shamshadin region of the Republic of Armenia. The contest kicked on the March 3 and closed at March 14. The results were announced on May by the impartial jury consisting of philologist teachers and the astronomer Areg Mickaelian (Chair) that had evaluated and selected the best essays.



The contest award ceremony was held at Byurakan Astrophysical Observatory (BAO) on October 10. The winners (15 pupils), teacher and FAR representative had a 3-day (July 18-20) stay at BAO guest house, got acquainted to BAO research and other activities, met professional astronomers, visited BAO 2.6m telescope and Viktor Ambartsumian's museum, had night observations and visited Amberd Medieval Fortress, Saghmosavank, Ohanavank and Park of Armenian Letters.

#### The list of the Winners:

#### 8th form

- 1. Marianna Manucharyan(Varagavan Secondary School)
- **2.** Vahe Gabrielyan (Chinchin Secondary School)
- 3. Ani Kharatyan (Artzvaberd Primary School)

#### 9th form

- 1. Inesa Avagyan (Verin Karmir Aghbyur Secondary School)
- 2. Alina Nigoyan (Berd No. 4 Secondary School)
- 3. Yura Dallakyan (Navur Secondary School)

#### 10th form

- 1. Artur Udumyan (Choratan Secondary School)
- 2. Ashot Khachatryan (Tzaghkavan Secondary School)
- 3. Svetlana Zargaryan (Artzvaberd Primary School)

#### 11th form

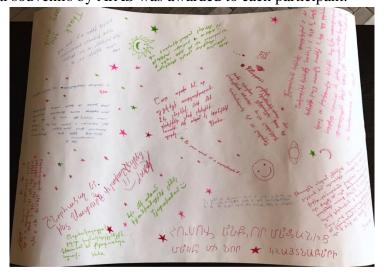
- 1. Harutryun Tsaturyan (Paravakar Secondary School)
- 2. Lia Avagyan (Nerkin Karmir Aghbyur Secondary School)
- 3. Anahit Makyan (Aygedzor Secondary School)

#### 12th form

- 1. Mariam Grigoryan (Norashen High School)
- 2. Diana Voskanyan (Chinari Secondary School)
- 3. Ani Arzumanyan (Aygepar Secondary School)



The winners were awarded with certificates and prizes. The principle prize was Avetik Grigoryan's popular science book "From the Deep of Ages to the Universe". The book presents a fascinating popular science story about the cognizing race of mankind in aeronautics, aviation, astronomy and astronautics starting from ancient ages to our time, as well as about the man-kind's space future. Under the attraction of 14 extraordinary phenomena and mysteries of the outer space this book leads the reader from simplest and ordinary notions to deep and encyclopedic knowledge in natural science and technology, awakes inquisitiveness, develops ability and tendency to creative research and investigation, as well as gives a comprehensive conception of Universe and the history of its study. A set of astronomical souvenirs by ArAS was awarded to each participant.



## Release of NRAO Newsletter June Issue



### **Upcoming Events**

☐ ALMA Baseline Correlator Workshop
May 2 - 5, 2016   Charlottesville, VA
☐ 15th Synthesis Imaging Workshop
Jun 1 - 8, 2016   Socorro, NM
☐ AAS Splinter Session: North American ALMA Development Program
Jun 14, 2016   San Diego, CA
☐ Half a Decade of ALMA: Cosmic Dawns Transformed
Sep 20 - 23, 2016   Indian Wells, CA
☐ Coexisting with Radio Frequency Interferance
Oct 17 - 20, 2016   Indian Wells, KA

## **Career Opportunities**

Research Engineer in Millimeter and Submillimeter Wavelength Electronics
Assistant Scientist
Deputy Head of the Joint ALMA Observatory Program Management Group (Deputy Program
Manager)

## Release of IAU Astronomy Outreach Newsletter 2017, June



- 0) From the Editors
- 1) National Outreach Contact (NOC) Corner: News from Italy
- 2) National Outreach Contact (NOC) Corner: News from Madagascar
- 3) All set for August Total Eclipse!
- 4) Galaxy Nurseries Introducing Zooniverse's 100th project!
- 5) The National Astronomical Observatory of Japan (NAOJ) 1 min. TOPICS
- 6) Looking for a new hobby? —An astronomy stamp collection might be worth a try
- 7) Mayan Archaeoastronomy: Observers of the Universe—Free planetarium show
- 8) StixCamp Open Education and Open Science through Citizen Science
- 9) Meetings & Global Events for 2017

Recently added

**Important Dates** 

Upcoming

- 10) IAU Astronomy Outreach Newsletter in other languages
- 11) Contributions to IAU Outreach Newsletter

#### Magda STAVINSCHI – 75



On June 12, well-known Romanian astronomer and an ArAS member Prof. Magda Stavinschi celebrated her 75<sup>th</sup> anniversary. She has received her PhD from the Astronomical Department of the Faculty of Mathematics-Mechanics, Bucharest University. In 1990-2005 Prof. Stavinschi was the Director of the Astronomical Institute of the Romanian Academy, also she was the President of the International Astronomical Union (IAU) Commission for education and development (2006-2009), president of the IAU WG "The Future Development of the Ground-Based Astrometry" (2000-2006), co-chairman of the IAU WG "Astrometry by Small Ground-Based Telescopes" (2006-2012), member of

the working group "Eclipse '99" of the European Council (1998-2000). She is the President of Archaeoastronomical Heritage Committee (European Society "Astronomy in Culture"), President of the association "Eclipse '99", now "Astronomia 21", President of the Institute for Transdisciplinary Studies in Science, Spirituality, Society (IT4S), National node for various European programs, e.g. EuroPlaNet, "Hands on Universe", President of the Association for the Dialogue between Science and Theology in Romania (ADSTR), Co-editor of the series "Science and Religion", "Science, Spirituality, 12 Society". Currently she is a Researcher at the Astronomical Institute of the Romanian Academy and associate researcher at the Institut de Mécanique Céleste et de Calcul des Éphémérides (IMCCE), Paris.

Her scientific interests are Astrometry, Celestial Mechanics, History of Astronomy, Astronomical Education, Science and Religion. Magda Stavinschi has published more than 300 scientific papers (more than half in refereed journals), 13 book chapters, 10 books (editor of 20 volumes), hundreds of articles in mass-media, as well as she has had various media presentations. Prof. Stavinschi has been honored "Officier de l'Ordre National du Merit", France, 2005, Radio Cultural Excellence Award for promoting the Romanian and international astronomical research during the scientific programs, 2002, UNESCO Excellence Award "Cecilia Banc for Science Popularization", 2004, as well as different medals and diplomas from Romania.

Magda Stavinschi is an IAU member (Commissions of Astrometry, Astronomical education and development, History of Astronomy, Outreach), founding member of the European Astronomical Society (EAS, 1990), member of the European Society Astronomy in Culture (SEAC), SubRegional European Astronomical Committee (SREAC), European society "Euroscience", Committee on Space Research (COSPAR), Member of the Romanian Committee for History and Philosophy of Science and Technology (CRIFST) of the Romanian Academy, member of ArAS since 2009.

## LUNAR CALENDAR OF JULY

