

ArAS News

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

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

INTERNATIONAL YEAR of ASTRONOMY NEWS



The astronomical community all over the world celebrates the **International Year of Astronomy (IYA-2009)**. Numerous events are being organized in 140 countries. Most important event was the one called **“Around the World in 80 Telescopes”** held during April 3-4 in frame of the Cornerstone Project **“100 Hours of Astronomy”**. A 24-hour webcast by UStreamTV was organized from 80 telescopes. An important event in professional astronomy was the launch of ESA space missions **Herschel** (for FIR/sub-mm studies) and **Planck** (for CMBR) on May 14.

Armenia is heavily engaged in IYA-2009 as well. Here are some of the **last activities and events**:

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| April 14, Byurakan | Reception of Ambassadors of foreign countries in Armenia (Ambassadors of the UK, Romania, Turkmenistan, EU, Vice-Ambassador of Germany, Head of the DAAD office in Armenia, and others) |
| April 15, Yerevan | IYA-2009 meeting for students of the Yerevan State University; presentation of the IYA-2009 movie by ESO <i>“Eyes on the Sky”</i> |
| April 18, Yerevan | Exhibition <i>“Armenia: a Country of Ancient Astronomy”</i> at Architect’s Union; photos by students of the Institute of Tourism taken in Byurakan Observatory and ancient observatory Karahunge |
| April 26, Byurakan | Armenian School Astronomical Olympiad final phase; 25 school pupils visited Byurakan and competed to define the best among them, as well as to qualify for the International Astronomy Olympiad to be held in autumn |
| April 30, Byurakan | Meeting between astronomers and architects (famous architects Sargis Gurzadyan, author of the 2.6m telescope and some other buildings in the Byurakan Observatory, H. Poghosyan, S. Kalashyan, M. Hasratyan, Chairman of the Architects’ Union of Armenia M. Minasyan, Director of the institute <i>“ArmStateDesign”</i> G. Azizyan, and others) |
| May 4, Byurakan | IYA-2009 meeting at the Byurakan Observatory; presentation of IYA-2009 Armenian Committee activities and further plans |

Next important meetings planned in Armenia:

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|--------------------|---|
| May, Byurakan | Meeting between astronomers and historians/archaeologists to discuss historic-astronomical problems in Armenia: rock-art, ancient calendar, ancient observatories, Anania Shirakatsi’s heritage, etc. |
| May-June | Further visits of groups of Armenian intellectuals (writers, artists, composers, actors, et al.) to Byurakan to have meetings with astronomers |
| May-June | IYA-2009 meetings and popular lectures at schools and institutes of Armenia |
| June 19, Byurakan | Young artists’ contest on <i>“My Universe”</i> combined with the visit of professional artists |
| June 26, Karahunge | Armenian Monuments Awareness Project (AMAP) meeting |

The IYA webpage is available at <http://www.astronomy2009.org/> and the IYA-2009 Armenian webpage, at <http://www.aras.am/lya2009/lya2009.htm>.

VIKTOR AMBARTSUMIAN INTERNATIONAL SCIENCE PRIZE



With a purpose of perpetuation of the National Hero of Armenia, celebrated scientist academician V.A. Ambartsumian's memory, as well as for the promotion of development of his scientific heritage, the **V.A. Ambartsumian International Science Prize** has been established by the President of Armenia equal to **USD 500 000**. The Prize will be awarded every other year (starting with 2010) to scientists of any nationality for unique scientific works in the fields of astrophysics, as well as the fields of physics and mathematics adjacent to the scientific activity connected with V.A. Ambartsumian. It will include cash award, diploma of the winner, honorable mark (medal) and its corresponding certificate. A special international Prize Committee will be created, which will include nine renowned scientists.

An official call for nominations will be announced in August at the IAU XXVII GA in Brazil. The right for nomination of works for V.A. Ambartsumian Prize request is reserved to Nobel Prize Winners, Presidiums of national academies of sciences, scientific councils of astronomical observatories, and councils of corresponding departments of universities.

ArAS/BAO/YSU 2009 AWARDS

As announced in the ArASNews #30, in connection with the International Year of Astronomy (IYA-2009), the Byurakan Observatory and ArAS will award following prizes at the end of 2009:

Benjamin Markarian award, for the **best observational result in astrophysics**.

Marat Arakelian award, for the **best statistical result in astrophysics**.

Ludwik Mirzoyan award, for **outstanding services in astronomy**.

Paris Pishmish award, for **female astronomers**.

In addition, **Gurgen Sahakian award** for the **best theoretical result in astrophysics** has been established in collaboration with the Department of General Physics and Astrophysics of the Yerevan State University (YSU).

For **Markarian, Sahakian, and Arakelian awards**, applications may be made by individual astronomers. In case of presence of co-authors, they should nominate a single person who has the most important contribution in the achieved result. The full paper (or series of papers having common result) published or accepted for publication is required along with short statement of the result, which is being presented for the award, as well as the CV of the applicant.

For **Mirzoyan and Pishmish awards**, nominations may be made by institutions or societies, as well as ArAS members. A 1-2 page justification is required describing the services of the nominee, including research, administration/organization of science, editorial and teaching activities, etc., as well as the CV.

For all awards, the deadline for applications/nominations is **December 1, 2009**.

ARMENIAN ASTRONOMERS at JENAM-2009



The Joint European and National Astronomical Meeting, the "European Week of Astronomy and Space Science", was the EAS meeting combined with the Royal Astronomical Society (RAS) annual meeting. It was held on **April 20-23, 2009** in **Hatfield, University of Hertfordshire, UK**. The scientific program consisted of 7 EAS



Symposia and 22 Special Sessions, 5 ESO sessions, as well as the EAS and RAS General Meetings and some other additional sessions. There were also EAS and RAS Prize Lectures and plenary lectures. More than 1000 astronomers participated, though most of them from the UK.

Dr. Areg Mickaelian represented Armenia in this European week of astronomy. He participated in the EAS Symposium *The IYA-2009 in Europe* (contributed oral talk *IYA-2009 activities in Armenia*), Special Session *The local volume: constraints on galaxy formation and evolution* (poster *Byurakan-IRAS Galaxy pairs as indicators of starburst and galaxy evolution*), and Special Session *The Virtual Observatory and distributed computing* (poster *Using VO tools for multiwavelength studies of Markarian galaxies*). Mickaelian also participated in the EAS Business Meeting (as the Armenian representative) and EAS General Assembly.

Dr. Alain Sarkissian from France (LATMOS) participated and contributed in the Special Session *The Virtual Observatory and distributed computing* (poster *Planetary Atmospheres: Developments of Data Archiving, Tools and Services at IPSL*).

Dr. Kirill Kuzanyan from Russia (IZMIRAN) and **Dr. Youri Taroyan** from the UK (Sheffield University) participated in the Special Sessions *Solar Physics, Magnetosphere, Ionosphere, Solar Terrestrial (MIST) meeting*, and *MHD seismology of Solar, space and astrophysical plasmas*. They presented contributions *Results of 20 Years Monitoring of Solar Vector Magnetic Fields: the Helicity Cycle* (K. Kuzanyan, poster) and *Heating Diagnostics with Magnetoseismology* (Y. Taroyan, oral talk).

At JENAM-2009, important discussions were held about the future large facilities, such as 42m E-ELT, space telescopes (Herschel, Planck, JWST), etc. One of the most important results reported was the discovery by the Swiss astronomer Michel Mayor of lightest exasolar planet, Gliese 581, with a mass of 1.94 times larger than the Earth. It is considered the first possible "habitable" planet among the 270 ones discovered so far.

Next JENAMs will take place in Lisbon (Portugal, 2010) and St. Petersburg (Russia, 2011).

FUTURE MEETINGS



IAU GA XXVII. The International Astronomical Union (IAU) XXVII General Assembly will be held on **August 3-14, 2009** in **Rio de Janeiro, Brazil**. The General Assembly will have 4 Invited Discourses, 6 Symposia, 16 Joint Discussions, 10 Special Sessions, the Women in Astronomy Lunch Meeting, and 2 Young Astronomers' Events. For the details, please visit the IAU GA web site, which is available at

<http://www.astronomy2009.com.br/>

SUMMER SCHOOL for YSU STUDENTS

The school will be held on **July 1-8, 2009 in Byurakan**. It is being organized jointly by BAO and ArAS and will give possibility to up to 25-30 Yerevan State University (YSU) students to stay in the observatory and learn astronomy, as well as to have possibility to meet Byurakan researchers and see the work of the research groups. The Byurakan astronomers and some other invited speakers will give reviews on different important topics of modern astrophysics, as well as a lot of useful practical exercises, including observations will be organized for the students.

Moreover, during the last days of their stay, the students will have chance to attend the sessions of the **ArAS VIII Annual Meeting** (see next section). The selection of students will be made on May 22 at the YSU.

ArAS VIII ANNUAL MEETING



ArAS VIII annual meeting will take place on **July 6-8, 2009 in the Byurakan Observatory**. Given that this year we all celebrate the International Year Astronomy, we have decided to devote our meeting to more general topics, including relation of astronomy and astrophysics to other fields of science and society. The first day (July 6) will be devoted to the astrophysical results, and two other days (July 7-8) will be devoted to Astrobiology, Archaeoastronomy and other general topics.

Organizing Committee (OC): H.A. Harutyunian (Co-Chair), T.Yu. Magakian, N.D. Melikian, A.M. Mickaelian (Co-Chair), T.H. Movsessian, E.H. Nikogossian (Secretary), E.S. Parsamian, L.A. Sargsyan.

Topics:

- Achievements of the Armenian astronomy
- Astronomy, cosmology and philosophy
- Astrobiology, life in the Universe
- Archaeoastronomy and history of astronomy
- Astronomical education
- Public outreach, amateur astronomy
- Scientific tourism and scientific journalism

We plan to invite representatives from RA National Assembly and Government, fields of culture, other sciences, journalists, teachers, amateurs, and other interested people.

There is no deadline for registration; it may be done at the registration desk at the venue. However, contributions are welcome since now and no later than **June 20**. Please send titles and abstracts of your contributions to the OC. The summaries of talks will be published electronically through our Newsletter.

For further information, please contact *Dr.* E.H. Nikogossian at elena@bao.sci.am. A webpage at <http://www.aras.am/Meetings/arasVIIIannualmeeting.html> is set up and an online registration form is available at <http://www.aras.am/Meetings/arasVIIIregform.html>.

NEW ArAS MEMBERS

We are happy to announce that during the last month we had 11 new ArAS members:

- **Dr. Gonzalo Alcaino** (Isaac Newton Institute, Chile),
- **Prof. Nikolai Bochkarev** (Sternberg Astronomical Institute, Russia),
- **Prof. Vassilis Charmandaris** (University of Crete, Greece),
- **Prof. Anatol Cherepashchuk** (Sternberg Astronomical Institute, Russia),
- **Prof. Ishtvan Jankovich** (Gothard Astrophysical Observatory, Hungary),
- **Dr. Daniel Kunth** (Institute d'Astrophysique de Paris, France),
- **Prof. Davit Sedrakian** (Yerevan State University, Armenia),
- **Prof. Magda Stavinschi** (Astronomical Institute of the Romanian Academy, Romania),
- **Prof. Milcho Tsvetkov** (Institute of Astronomy, Sofia, Bulgaria),
- **Prof. Massimo Turatto** (Catania University, Italy),
- **Dr. Mihran Vardanyan** (University of Oxford, UK).

All new foreign members have tight relations to the Armenian astronomy, most of them many times visited Byurakan either spent some period there, like Milcho and Ishtvan, who were Ph.D. students at the Byurakan Observatory in 1970s and defended their theses in Armenia, and M. Turatto, who spent a few months in Byurakan in early 1980s. Three of the new ArAS members are directors at the mentioned institutes (G. Alcaino, A. Cherepashchuk, and I. Jankovich), and D. Sedrakian is the Head of the Department of General Physics and Astrophysics at the YSU. G. Alcaino has founded the Isaac Newton Institute with its branches in many countries (including Armenia) and supports publications of the Armenian astronomers in prestigious international journals. M. Stavinschi is the President of the IAU Commission #46 (*Teaching in Astronomy*). N. Bochkarev is the former Co-President of the Euro-Asian Astronomical Society (EAAS) and at present he is the Chair of its International Bureau. V. Charmandaris is the Editor of the EAS Newsletter. D. Kunth was the Coordinator of the French-Armenian collaboration (PICS and Jumelage) during 10 years (1994-2003). M. Turatto is the Chair of an Italian-Armenian Cultural Association. Many of these astronomers have collaborative projects and a number of joint publications with the Byurakan scientists.

At present **ArAS has 77 members from 18 countries** and may in fact be regarded as an international organization. 48 members are from Armenia (35 BAO, 6 YSU, 4 YerPhI, 3 other), 9 from the USA, 3 – Mexico, 2 – France and Russia, 1 – Bulgaria, Canada, Chile, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Romania, Spain, UK, and Ukraine.

The full list of ArAS members with links to their personal webpages is available at <http://www.aras.am/Members/members.html>.