ArAS News

N E W S L E T T E R 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*

SUMMARY of the ASTRONOMICAL YEAR 2013

A meeting on the **Summary of the Astronomical Year 2013**, organized by Armenian Astronomical Society (ArAS), took place on the 27th of December, in the National Academy of Sciences of the Republic of Armenia (NAS RA). The meeting was devoted to the outcomes of astronomical research and scientific-organizational activities and events both in Armenia and abroad.

Radik M. Martirosyan, the President of NAS RA, opened the meeting with his speech and emphasized the importance of BAO 2.6m telescope aluminization. Later **Hayk A. Harutyunyan**, the Director of Byurakan Astrophysical Observatory (BAO) had a talk mostly devoted to the observational possibilities of BAO, and **Areg M. Mickaelian**, the Co-President of Armenian Astronomical Society (ArAS) had a summarizing report on Astronomical Events of 2013.

In his report A.M. Mickaelian mentioned that this astronomical year was rather fertile and full of events. One of the most important astronomical events of 2013 was the **IAU Symposium #304 *"Multiwavelength AGN Surveys and Studies"***, dedicated to Beniamin Markarian's 100th anniversary. It was the largest symposium ever held in Armenia both by the number of its participants (140) and represented countries (28) and its international significance.

Other important astronomical events in Armenia were the recognition of **BAO as National Value** by the Armenian Government and increasing of its budget, the **renovation of the 2.6m telescope and aluminization of its mirror**, award to 7 Armenian astronomers the status of most productive scientists in Armenia (among 100), a number of projects and grants (SCS thematic, SCS-CNRS, ANSEF, etc.), BAO joining to ICSU World Data System (WDS), Armenia joining to UN COPUOS (Committee for Peaceful Users of the Space) and creation of the Armenian Space Agency, Armenian-Georgian astronomical colloquium, 2 other astronomical meetings organized by YSU, the Fourth Byurakan Summer School (4BSS), establishment of the ICRANet office in Armenia, Armenia joining the International Planetary Data Alliance (IPDA), call for Viktor Ambartsumian International Prize 2014, bronze medals of Armenian pupils at the International Astronomical Olympiad, ArAS School Lectures at Artsakh schools, new webpages at ArAS website, publication of astronomical books, publication and production of astronomical souvenirs, 3 years of Scientific Journalism in Armenia, and so forth.

The astronomers' greatest expectation for 2014 is that Armenia will gain the official status of IAU Regional Office of Astronomy for Development (ROAD).

The award ceremony was held at the end of the Summary Meeting. The following certificates were awarded:

ArAS Annual Prize for Young Astronomers (Yervant Terzian Prize) 2013

Hayk Abrahamyan (BAO, Armenia)
Avet Harutyunyan (IAC, Spain)

Galileo Teacher Training Program (GTTP) Diploma

Robert Sargsyan

Certificate of Honour for medal winners of the XVIII International Astronomy Olympiad

Vardges Mambreyan
Arsen Vasilyan
Hrant Topchyan
Hayk Soghomonyan

Certificate of Appreciation for great contribution in astronomical education

Marietta Gyulzadyan
Avetik Grigoryan

Certificate of Appreciation for great contribution in popularization of astronomy

Ruben Buniatyan

Certificate of Appreciation to Mass Media for illustration of science in 2013

"168 Zham" Newspaper
"Aravot" Newspaper
"Armenpress" News Agency
ArmNews TV company
AR TV company
ATV company
"eMedia.am" News Website
Shant TV company

Certificate of Appreciation to journalists for illustration of science in 2013

Tatevik Grigoryan (Armenpress)
Mane Hakobyan (free journalist)
Anahit Sargsyan ("News.am")
Lusine Movsisyan ("168 zham")
Ani Karapetyan ("asekose.am")
Artur Hovhannisyan ("Hayacq")
Gohar Hakobyan ("Aravot")

The winners also got books, booklets, astronomical calendars, BAO cups, models of Byurakan 2.6m telescope, and other astronomical souvenirs.

CHRONOLOGY of ASTRONOMICAL EVENTS in 2013

A.N.S.E.F.

The Armenian National Science & Education Fund

January

- **BAO** was awarded a **status of National Value** and at present is one of the 4 Armenian scientific, cultural and educational institutions having such status (Matenadaran, YSU, Genocide Museum-Institute and BAO); BAO budget significantly was increased
- Byurakan Astrophysical Observatory (BAO) researchers were awarded 3 **Armenian National Science and Education Fund (ANSEF)** grants (among 25), including 10 researchers
- **Armenian State Committee on Science (SCS) thematic grants**; award of thematic grants to 3 BAO groups (PIs: Tigran Magakian, Elena Nikoghosyan, Artashes Petrosian)
- **Armenia joined UN COPUOS** (Committee for Peaceful Users of the Space) and the **Armenian Space Agency** was created
- Areg Mickaelian participated in the **EAS Affiliated societies meeting** in Rolle, Switzerland
- **"Calendar of Astronomical Events 2013"** webpage was created at ArAS website
- **Planetary triple conjunctions 2001-2050 webpage** at ArAS

February

- **Beniamin Markarian webpage** was created at ArAS website
- ***Prof.*** **Yervant Terzian was awarded Anania Shirakatsi medal** by the Armenian Government
- **2012 DA14 asteroid** passed at 27.700 km distance from the Earth

ICRANet

International Center for Relativistic Astrophysics Network

March

- **Haik Harutyunian** participated in the ICRANet Directors' Board meeting in Pescara, Italy
- **Periodic comets list** at ArAS website

April

- **Republican Astronomical Olympiad** was held in Byurakan, selection of the participants of the International Astronomical Olympiad
- **Nune Mirzoyan** published the book *"A Life devoted to Byurakan"* (about Ludwik Mirzoyan)

May

- **ArAS school lectures program** together with the Ministry of Education and Science of Artsakh Republic by professional astronomers (Areg Mickaelian, Hovhannes Pikichian, Gohar Harutyunyan) at 5 high schools in Stepanakert and Shushi and Artsakh State University

- ***Prof.*** **Agop Terzan was awarded Anania Shirakatsi medal** by the Armenian Government

June

- BAO joined ICSU World Data System (WDS)
- Award to 7 Armenian astronomers the status of most productive scientists in Armenia (among 100)
- **Avetik Grigoryan** published the sci-popular book *"From the deep of ages to the Universe"*
- **Lilit Nazaryan** published the book *"Anania Shirakatsi"*

July

- **Areg Mickaelian** participated in the EAS Annual Meeting (EWASS-2013) in Turku, Finland
- Establishment of the **ICRANet office in Armenia**
- Armenia joined the **International Planetary Data Alliance (IPDA)**
- Creation of **online Astronomical Journal "Astxagitak"**

August

- **Fourth Byurakan Summer School (4BSS)** and **IAU S304 training** courses
- **XIV Armenian-Georgian astronomical colloquium** in Byurakan

September

- Call for **Viktor Ambartsumian International Prize 2014**
- **Four Bronze medals of Armenian pupils** at the International Astronomical Olympiad
- Meeting ***"The Modern Physics of Compact Stars and Relativistic Gravity"*** in Yerevan, organized by YSU
- Meeting ***"Quantum Aspects of Black Holes and its Recent Progress"*** in Yerevan, organized by YSU

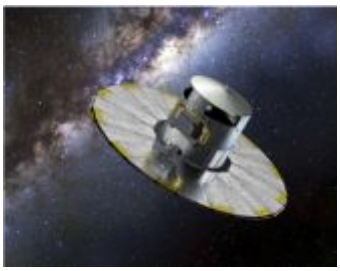
October

- **IAU Symposium #304** ***"Multiwavelength AGN Surveys and Studies"***, dedicated to Beniamin Markarian's 100th anniversary
- **Renovation of the 2.6m telescope and aluminization of its mirror**
- **BAO's exhibition** at NAS RA 70th anniversary
- **International Astronomy Olympiad (IAO)** in Lithuania; Armenian pupils won 4 bronze medals (; team leaders: Marietta Gyulzadyan and Tigran Nazaryan)

- **Publication of "Beniamin Markarian"** booklet
- **Publication of Astronomical Calendars 2014**: "Byurakan Observatory", "Viktor Ambartsumian (most important scientific results)", "Armenian Astronomers", and "Lunar Phases 2014"

November

- **RA President's visit to BAO**
- **ISON comet** at perihelion



December

- **Launch of GAIA satellite**
- **Three years of Scientific Journalism** in Armenia, founded by ArAS
- **BAO annual meeting** with the report by the Director Hayk Harutyunyan
- **Summary of Astronomical Year 2013** meeting at NAS RA, Yerevan
- **Hayk Abrahamyan and Avet Harutyunyan** were awarded **ArAS Annual Prize for Young Astronomers (Yervant Terzian Prize) 2013**
- **Robert Sargsyan** was awarded **Galileo Teachers Training Program (GTTP) international Certificate**
- Award of the first **ArAS Certificates of Honour for great contribution in astronomical education** (Marietta Gyulzadyan and Avetik Grigoryan) and **in popularization of astronomy** (Ruben Buniatyan)
- Award of **Certificates of Appreciation** and astronomical souvenirs to **mass media and journalists** actively writing on astronomical subjects (8 mass media and 7 journalists)

VIKTOR AMBARTSUMIAN INTERNATIONAL PRIZE 2014

Call for nominations

Viktor Ambartsumian 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 totals USD 500,000 and is being awarded once every two years, starting with 2010.

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 right for the nomination of works is reserved to:

- Nobel Prize Winners
- Presidiums of national academies of sciences

- scientific councils of astronomical observatories
- councils of corresponding departments of universities

Nominations for Viktor Ambartsumian 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,
3. Curriculum Vitae of the nominee(s),
4. List of refereed publications of the nominee(s),
5. General annotations with reports of three referees,
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 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, 2014. The decisions will be made before July 18, 2014 and Award of Viktor Ambartsumian Prize will take place on September 18, 2014.

Viktor Ambartsumian Prize International Steering Committee: *Prof.* Radik M. MARTIROSYAN (Armenia, Chair, *president@sci.am*), *Prof.* Gennady S. BISNOVATYI-KOGAN (Russia, *gkogan@mx.iki.rssi.ru*), *Prof.* Catherine J. CESARSKY (France, *catherine.cesarsky@cea.fr*), *Prof.* Norio KAIFU (Japan, norio.kaifu@nao.ac.jp), *Prof.* Michel MAYOR (Switzerland, *michel.mayor@unige.ch*), *Prof.* Vahé PETROSIAN (USA, vahep@stanford.edu), *Prof.* Martin J. REES (UK, *mjr@ast.cam.ac.uk*), *Prof.* Yervant TERZIAN (USA, *terzian@astro.cornell.edu*), *Prof.* Robert E. WILLIAMS (USA, *wms@stsci.edu*).

Contact: *Dr.* Areg M. MICKAELIAN (Scientific Secretary, International Steering Committee, phone: +374-91-195914, E-mail: *aregmick@aras.am*, *aregmick@yahoo.com*).
Sona V. FARMANYAN (Executive Secretary, International Steering Committee, phones: +374-10-525505, +374-55-911307, E-mail: *sona.farmanyan@mail.ru*, *vaprize@sci.am*).

Viktor Ambartsumian International Prize official webpage: http://vaprize.sci.am.

Previous winners of Viktor Ambartsumian International Prize were:

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* and **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*

Areg Mickaelian, Scientific Secretary, VA Prize Steering Committee

ArAS PRIZE for YOUNG ASTRONOMERS (YERVANT TERZIAN PRIZE)

ArAS Annual Prize for Young Astronomers (Yervant Terzian Prize) 2013 was awarded at the Summary Meeting of the Astronomical Year 2013 held on on December 27 at the Armenian National Academy of Sciences (NAS RA). This time the Prize was shared between **Hayk Abrahamyan** (BAO, Armenia) and **Avet Harutyunyan** (IAC, Spain), Certificates and USD 250 to each.

Hayk Abrahamyan (29), has graduated from YSU in 2009 and works at BAO, at present as a junior research associate. His scientific interests are on active galaxies, especially radio galaxies and radio properties of AGN. He is an ArAS member since 2010 and at BAO he is a member of the Armenian Virtual Observatory (ArVO) group. In 2013 he has 3 papers published in Astronomisches Nachrichten, Astrophysics, and NAS RA Reports. In addition, he has presented 7 posters at the IAU S304, gave a lecture at 4BSS and participated in the summer school in Romania. He was a member of the organizing committees of 4BSS and IAU S304.

Avet Harutyunyan (33), has graduated from YSU and entered post gradute studies at BAO. Later he moved to Padua Astronomical Observatory in Italy and as a member of the Telescopio Nazionale Galileo (TNG) group is at present at IAC, Roque de Los Muchachos, La Palma, Canary Islands, Spain. His research interests are Supernovae and exoplanets. In 2013 Avet has published 8 papers in Nature, ApJ, A&A (4), and MNRAS (2). Especially important was his paper in Nature with a discovery of an Earth-like planet Kepler-78b (see ArASNews #67). In addition, he has published a number of short papers in ATel (3), CBET (5) and GCN (2) and participates in HARPS-N, GAPS and INAF grants.

The Prize was established in 2004 and is being sponsored by one of ArAS Co-Presidents ***Prof.*** **Yervant Terzian** (Cornell University, USA). Since 2009 the Prize is named after Yervant Terzian. Altogether, 11 young astronomers have been winners (in some years the Prize was shared between two astronomers), including Lusine Sargsyan, Vardan Adibekyan and Parandzem Sinamyan; each of them twice has become winner.

ArAS Annual (Yervant Terzian) Prize Winners

2013 Hayk ABRAHAMYAN (BAO) and Avet HARUTYUNYAN (IAC, Spain)
2012 Vardan ADIBEKYAN (CAUP, Portugal)
2011 Marine AVTANDILYAN (ASPU)
2010 Parandzem SINAMYAN (BAO)
2009 Lusine SARGSYAN (BAO)
2008 Vardan ADIBEKYAN (YSU) and Artur HAKOBYAN (BAO)
2007 Igor CHILINGARIAN (OBSPM, France)
2006 Lilit HOVHANNISYAN (BAO) and Parandzem SINAMYAN (BAO)
2005 Artak HARUTYUNYAN (BAO) and Elena HOVHANNESSIAN (BAO)
2004 Lusine SARGSYAN (BAO)

THREE YEARS of SCIENTIFIC JOURNALISM

In December 2010 a group of the Scientific Journalists of Armenia was created to facilitate and promote scientific (mostly astronomical) publications in mass media. Some 80 members are involved in the mailing list of this group from various mass media: TV, radio, newspapers, Internet media, as well as some other scientists. In addition, a Facebook group has been created and 459 members are active, including (mostly young) scientists and journalists. On December 13, 2010, the first ArAS press-release was distributed through mailing list and the FB group. Since then, 273 press-releases have been distributed (in average, 7-8 ones monthly) resulting in more than 2500 publications in newspapers and Internet web-sites. Moreover, a number of interviews and press-conferences were taken additionally to present more detailed materials on various subjects. For the moment, the prevailing number of the publications is related to space subjects and contribution from other fields of science is desirable and welcome. Thus, a significant increase of scientific publications and of interest to astronomy/science has been recorded. We have also organized a number of seminars on interesting subjects of astronomy and related fields. In 2011 ArAS together with the Oxford Armenian scientific society (OxArm) established and awarded prizes for the best scientific journalists and in 2013 ArAS awarded certificates and astronomical souvenirs to mass media and journalists who actively write on science and especially astronomy.

The main activities of the scientific journalism are:

- **ArAS regular press-releases**, typically 7-8 times monthly,
- **interviews by astronomers** on various subjects of astronomy and space science,
- **popular articles, TV and radio programs** on astronomical subjects,
- **press-conferences** on important aspects and events,
- **scientific journalism seminars** on various topics of astronomy and other sciences,
- **prizes and awards** to scientific journalists and mass media.

The FB group is active at https://www.facebook.com/groups/144651068920380/

ANNIVERSARIES. BENIAMIN MARKARIAN – 100

Very few astronomers with their contribution in the observational astronomy can be compared with Benyamin Markarian. After the distinguished scientist Viktor Ambartsumian he is very likely the greatest person of Armenian astronomy. His survey and Markarian galaxies are known to each astronomer and not only to astronomers. So far many astronomers and world observatories work on investigations of Markarian galaxies.

Benyamin Y. Markarian was born on November 29, 1913 (according to the new style, on December 12) in Shulaver (at present Shahumyan) of the district of Marnueli of the Soviet Republic of Georgia. In 1933 he entered and in 1938 with a diploma of excellence graduated from the faculty of physics-mathematics of Yerevan State University. In 1938-1941 he worked as a senior lecturer of higher mathematics at Yerevan Pedagogical Institute. In 1939 B. Markarian entered the post-graduate fellowship of the Armenian branch of the USSR Academy of Sciences in the sphere of

astrophysics and went to Leningrad University. But his studies were interrupted by World War II and in 1941 after returning to Armenia he was called up to the Army. After the Army he was a senior researcher at the Yerevan Astronomical Observatory (1942-1946). In May 1944 under the academician V. Ambartsumian's supervision Markarian successfully defended his candidate thesis on a subject "The fluctuations observed in the visible distribution of stars and the cosmic absorption". Since 1946 (since the day of foundation) he was a senior researcher at the Byurakan Astrophysical Observatory, in fact being one of its founders. Markarian actively participated in the selection of the site of the new observatory, which needed serious work for further effective observations. Markarian personally mounted and put almost all telescopes of the Byurakan Observatory into operation (except the last telescope of 2.6 m), thus making basis for the development of observational astronomy in Armenia.

In 1953-1956 Markarian worked as a deputy director on science of the Byurakan Observatory. He was appointed as the Head of the Department of Investigation of Stars from 1957 to 1962, then of the Department of Galaxies from 1962 to 1985. In 1943-1956 he also worked as a lecturer of astronomy at Yerevan State University. He was elected as a corresponding member of the Academy of Sciences of the Armenian SSR (1965), as a full member of the Academy of Sciences of the Armenian SSR (1971). He was awarded a title of Honored Scientist of the Armenian SSR (1961). Markarian was elected as a member of Astronomical Council of the USSR Academy of Sciences (1964), he a member of the International Astronomical Union (IAU, 1955), he was elected as a Vice-President of the IAU Commission on Galaxies (1973-1976) and its President (1976-1979).

B. Markarian's scientific works refer to the physics of stars, stellar clusters and galaxies. He took part in working out of the theory of fluctuations observed in the distribution of stars taking into consideration the interstellar absorption. On the basis of observational data he has confirmed that the stellar associations expand. Markarian has worked out a new classification of stellar clusters and in 1952 he has compiled and published "An atlas of different types of stellar clusters". In 1963 he revealed 73 galaxies with an unusual color to their spectral class. He has worked out a special method (for selecting galaxies with ultra-violet excess) on the basis of which 1965-1980 a spectral sky survey was obtained in the Byurakan Observatory. He has revealed 1500 objects of special class which are called by his name (Markarian galaxies or galaxies with ultra-violet excess). Since 1968 with the help of large telescopes of the USSR and the USA, spectral observations of these galaxies were carried out and a great number of active galaxies were discovered among them essentially changing our understanding concerning the population of the Universe and the activity of galaxies. Later from 1974 to 1991 again on Markarian's initiative the Second Byurakan Survey was conducted in which a great number of quasars and other active galactic nuclei were revealed. The catalog of Markarian galaxies was published after his death by his colleagues in the USA in 1986 and in the USSR in 1989.

B. Markarian has published more than 100 scientific papers. He is a USSR State Prize winner (1950). He was awarded the orders "Sign of Honor" (1955) and "Peoples' Friendship" (1983), as well as a number of medals and diplomas of the Presidiums of the Academies of Sciences of the USSR and the Armenian SSR and of the Supreme Council of the Armenian SSR.

Benyamin Markarian passed away on September 29, 1985 in Yerevan. Till the end of his life, in spite of his poor health, he actively worked doing the main job of his scientific life; the Byurakan Surveys.

ANNIVERSARIES. PARIS HEROUNI – 80

Prof. **Paris M. Herouni**, a famous scientist, radio-physicist, radio-engineer, and radio-astronomer was born on December 17, 1933 in Yerevan. Upon completion of his undergraduate studies in Yerevan, he attended Moscow Power Institute, where he got his graduate degree in Radio Engineering in 1957. He would go on to get his Ph.D. in Radio Engineering from the same institution in 1965. Herouni became Doctor of Science in 1972 and Professor, in 1983. In 1996 he was elected Full member of the Armenian National Academy of Sciences (NAS), and in 1999, Member of the Armenian Academy of Engineering. In 1971, P.M. Herouni founded the Institute of Radio-Physical Measurements (IRM) and was its Director since its foundation until his death. In 1983, he founded and headed the Chair of Antenna Systems at the Yerevan State Engineering University. Since 1972 he was the Chief Constructor of the Automated Radio Engineering Systems, and since 1981, the Chairman of the Scientific Council on Radio Electronics of the Armenian NAS.

P.M. Herouni left scientific heritage in the fields of radio-physics, radio-engineering, and radio-astronomy. Herouni's scientific discoveries and theories include his theory and calculations on the Method of the Large Double Mirror Antennas with Fixed Spherical Main Mirror, the theory and equations of electromagnetic field diffraction on the holes (apertures) of different configurations, Radio holography – methods of field determination in space by measurements of complex field near (NF) of the emitting or scattering objects, Methods of Near-to-Far (NF – FF) measurements of antennas and scattering objects parameters, theory of field diffraction in antenna edges when illuminates the part of main aperture, and foundation of the direction of Antenna Metrology.

Among P.M. Herouni's many experiments are the First Radio-Optical Telescope (ROT-54/2.6 with a radio antenna with a diameter of 54m and an optical mirror with a diameter of 2.6m), the "Herouni Mirror Radio telescope" (projected, built, and adjusted by him), the large antenna of which has one of the best parameters among all large antennas in the world. He concluded and built antenna parameters and phase shift angle, being the first 11, based on the World National Primary Standards. The "AREV" project in 1992 was a new type of powerful and ecologically pure Solar Power Plant. He was the first to come across the powerful radio-flare on Etta Gemini star, a red giant and the powerful flares associated with that type of star. He also was the first to measure an aperture of an antenna, in the World Radio Hologram. Using this, he designed and built many highly, effective Automatic Complexes of equipment for NF – FF Antenna Measurements.

In more recent times P.M. Herouni began to take an interest in megalithic structures, such as Karahunge, which is an ancient observatory. By using four telescopic methods and the precession laws of Earth, he proved that Karahunge was more than 7500 years old; dating it to around 5,500 B.C. Though the age of Karahunge has not yet been finally established, Herouni's works received high estimates by the world foremost experts on stone monuments (Prof. Gerald S. Hawkins et al.). P.M. Herouni has written about his discoveries and more in his recent book, Armenians and Old Armenia.

Because of his many scientific discoveries, P.M. Herouni has received numerous awards, such as, the Order of Red Labour Banner, Silver Medal of Catholicos of All Armenians (given to him by Vazgen I), State Prize of Armenia (1985), State Prize of the USSR in the field of Science (1986), Medal of Veteran of Labour, Bronze Medal from the Ministry of Foreign Affairs of France, Prize of the International Committee on Antennas and Propagation of Waves (1989), and the Russian Academy of Sciences Lomonosov Gold Medal. In addition, he also holded over 20 patents, and had published over 340 scientific papers, including 2 monographs. Herouni was member of a number of international organizations, including EAAS.

Prof. Paris Herouni passed away after a long illness on December 5, 2008.

ANNIVERSARIES. DAVIT SEDRAKIAN – 75

Prof. **Davit Sedrakian** is one of the most outstanding Armenian modern physicists; the main topic of his investigations was and remains the theoretical astrophysics, and the most important results were achieved in that sphere.

Davit Mher Sedrakian was born on December 9, 1938 in Yerevan. In 1961 he graduated from the Yerevan State University. In 1964 he defended his Candidate thesis of physical-mathematical sciences on the diffraction radiation of a charged point particle. In 1964-1977 he worked at the chair of theoretical physics of Yerevan State University, in 1972 he was awarded a doctorate of physical-mathematical sciences, 1975 he was awarded a professorship of the chair of theoretical physics, in 1974-1986 and since 1994 he was the head of the chair of general physics. He was elected a Corresponding Member of the Armenian SSR Academy of Sciences (1982) and an academician (1990). In 1985-1990 Sedrakian was an Academician-secretary of RA National Academy of Sciences, in 1990-1994 its Vice-president. He was also the president of the Council of Theoretical Physics and Astrophysics of RA National Academy of Sciences, a number of scientific councils, including a member of the scientific council and professional council of the Byurakan Astrophysical Observatory. Since 2000 he is the Editor-in-Chief of the main astronomical journal of Armenia “Astrophysics” as well.

Sedrakian’s works refer to the theory of diffraction radiation and theoretical astrophysics, the theory of gravitation, the theory of superfluidity and superconduction. Since 1960s he worked on the theory of cosmic superdense bodies, a problem, which was put forward by academician Viktor Ambartsumian, and which was developed in collaboration with Sedrakian’s scientific adviser academician Gurgen Sahakian. He investigated the diffraction radiation of charged particles. He found one of few solutions of Einstein’s equations describing the magnetic field; the axial-symmetric solution in vacuum, on its basis he formed a theory of rotational celestial bodies, which he used for the research of physical characteristics of polytrope stellar models, white dwarf stars and baryon stars. The results of that theory proved that Englishman A. Hewish’s revealed pulsars were rotational neutron stars. He also took up the problem of the origin of superpower magnetic fields in pulsars; in particular, he proposed a theoretical mechanism based on superfluidity property of neutrons and protons. He investigates the observing deceleration of rotatory motion of pulsars, as well as the parted energy, the mechanism of radio-radiation during the deceleration.

As a result of these works Sedrakian published more than 200 scientific articles, including in the most important international journals of physics and astrophysics. During long periods of time Sedrakian has an active collaboration with scientists of the USA, France and other foreign scientists and on purpose of invited seminars, scientific researches, participation in conferences and scientific discussions he visited a number of international scientific centers.

Davit Sedrakian was awarded a Lenin Young Communists' Union Prize winner of Armenia (1970); he was awarded Anania Shirakatsi medal (1999), as well as a number of other scientific honors and grants; CRDF, ANSEF and others. He was the head of numerous famous physicists who successfully work at Yerevan State University and other places at present. He is a member of International Astronomical Union, Armenian Physical Society and Armenian Astronomical Society (2009), a number of other scientific organizations.