

ArAS News

NEWSLETTER

ARMENIAN ASTRONOMICAL SOCIETY (A r A S)







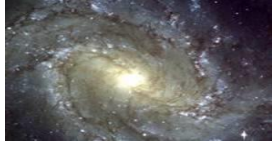



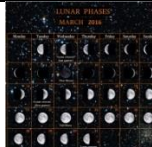


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Editor: Sona FARMANYAN

ArAS Newsletter online at: <http://www.aras.am/ArasNews/arasnews.html>

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EUROPEAN WEEK OF ASTRONOMY AND SPACE SCIENCE



The European Week of Astronomy and Space Science (EWASS, formerly JENAM) is the annual meeting of the European Astronomical Society (EAS). With more than 20 years of tradition, it has imposed itself as the largest conference for European astronomy. In addition to plenary sessions and the award of prestigious prizes, the conference hosts many symposia held in parallel, as well as special sessions and meetings. For the first time EWASS 2016 is held in Athens, Greece and is expected to welcome over 500 astrophysicists from all over Europe and even beyond.

A number of scientific meetings and other sessions and events are planned during EWASS-2016:

Symposia

- S1 On the Threshold of 1st Gaia Data - the Gaia Research for European Astronomy Training (GREAT) Network Science Symposium
- S2 Understanding CMB Polarization Foregrounds - Clearing the Path to Inflationary B-modes
- S3 MUSE first year science and beyond
- S4 Future Prospects for Far-Infrared Space Astrophysics
- S5 How galaxies live and die: the onset and end of star formation across cosmic time
- S6 Exploring the outskirts of galaxy clusters
- S7 X-rays from AGN: looking into the central engine
- S8 Interstellar dust and gas coupling: linking observations, models and laboratory astrophysics
- S9 The Dynamics of Star and Planet Formation
- S10 Probing the New Frontiers with Cluster Lenses
- S11 Gamma-ray bursts: recent theoretical models and observations
- S12 Stellar and AGN feedback in galaxies: a multi-wavelength perspective of outflows
- S13 High and Very-High Energy Gamma-ray Astronomy: status and future
- S14 New Classes and Unique Events in Time Domain Astronomy
- S15 Exploring pulsar formation, evolution and magnetic field: from low mass X-ray binaries to magnetars
- S16 Frontiers of massive-star evolution and core-collapse supernovae
- S17 Magnetic Helicity in Sun and Stars: From Dynamo Action to Eruptive Phenomena

Special Sessions

- SS1 The Square Kilometre Array Observatory: Current Status and Science Program
- SS2 Solar-Terrestrial Coupling and Space Weather: State-of-the-Art and Future Prospects
- SS3 Evolved stars at high angular resolution
- SS4 Planning the large spectroscopic surveys with the next generation of European high-multiplex spectroscopic survey instruments
- SS5 A multi-messenger view of mergers and multiple supermassive black holes
- SS6 The life and times of the Milky Way bulge
- SS7 The effects of solar and stellar magnetic activity on planets
- SS8 The challenges of multiple stellar populations in globular clusters
- SS9 Episodic accretion in star formation
- SS10 Nanoradians on the sky: VLBI across the Mediterranean and beyond
- SS11 The interplay between turbulence and micro-physical processes
- SS12 Promoting Diversity in Astronomy



15 March 2016	Abstract submission deadline
mid-April 2016	Participants informed on the status of their contributed talks and posters. Session programme on website as far as available
end-April 2016	Second announcement
30 April 2016	End of early bird registration
4 July 2016	End of regular registration
4–8 July 2016	Conference held at the Eugenides Foundation and the Metropolitan hotel following the programme

The EAS together with one of its affiliated societies, organises the annual EWASS conference to enhance its links with national communities, to broaden connections between individual members and to promote European networks.

Contacts

Conference Secretariat

Please feel free to contact the Conference Secretariat should you have any question about registration, abstract handling (submission & reviewing), accommodation, fee payment, visa requests, social events, etc.

Tel: +41 58 702 62 97

Fax: +41 58 702 64 52

E-mail: ewass2016@kuoni.com

Local Chair

Please contact [Vassilis Charmandaris <vassilis@physics.uoc.gr>](mailto:vassilis@physics.uoc.gr) – the chair of the EWASS Hosting Committee (EHC) – for any special organisational request.

Scientific Chairs

Please contact [Nick Kylafis <kylafis@physics.uoc.gr>](mailto:kylafis@physics.uoc.gr) and/or [Susanne Aalto <susanne.aalto@chalmers.se>](mailto:susanne.aalto@chalmers.se) – the co-chairs of the Science Organising Committee (SOC) – for issues concerning the selection and scheduling of Symposia, Special Sessions and Meetings, as well as of Plenary Talks.

EWASS-2016 webpage: <http://eas.unige.ch/EWASS2016/>

IAU Receives Edinburgh Medal



As IAU Office of Astronomy Newsletter reports the 2016 Edinburgh Medal will be jointly awarded to Kevin Govender from IAU's Office of Astronomy for Development and the International Astronomical Union (IAU) on Wednesday 30 March at the 2016 Edinburgh International Science Festival, to recognise their wide-reaching contribution to science.

It is awarded jointly for the creation and practical establishment of the Office of Astronomy for Development, which integrates the pursuit of scientific knowledge with social development for and with those most in need. Under the pioneering stewardship of Kevin Govender, the Office of Astronomy for Development, hosted at the South African Astronomical Observatory in partnership with the National Research Foundation and the South African Department of Science and Technology, has successfully harnessed astronomy in the service of global education and capacity building.

The Edinburgh Medal is a prestigious award given each year to men and women of science and technology whose professional achievements are judged to have made a significant contribution to the understanding and well-being of humanity. The 2016 Edinburgh International Science Festival will run from 26 March to 10 April.

Kevin Govender and President of the IAU Silvia Torres Peimbert will be presented with the Edinburgh Medal at the Chambers of the City of Edinburgh Council on Wednesday 30 March. They will give the Edinburgh Medal Address: Astronomy for a Better World as part of the 2016 Edinburgh International Science Festival, in the presence of Lord (Martin) Rees, the UK Astronomer Royal.

On behalf of the IAU, its President Silvia Torres Peimbert said; *"I am delighted that the work of the IAU in the field of development has been recognized by the award of this medal. Astronomy is an exciting and stimulating pursuit and has a large part to play in inspiring the next generation of scientists from developing countries. I hope this award will highlight this important work and encourage others to contribute."*

The IAU General Secretary, Piero Benvenuti, adds: *"IAU is proud of the prestigious recognition awarded to its Strategic Plan of Astronomy for Development and wishes to congratulate the visionary initiators of the Plan: George Miley, Robert Williams and Ian Corbett, as well as the South African National Research Foundation that, as IAU partner in the project, is effectively contributing to the success of the Plan."*

Creation of the Laboratory of Astrophysical Research at YSU



In January 2016, Laboratory of Astrophysical Research was established at Yerevan State University (YSU), Physics Department. The Laboratory is attached to the Chair of General Physics and Astrophysics after Viktor Ambartsumian. *Prof.* Misha Kazaryan was appointed the Head of the Laboratory and in fact is its scientific leader. Other members of the Laboratory are Emilia Karapetyan (Senior Researcher), Jaklin Martirosyan and Gohar Petrosyan (researchers).

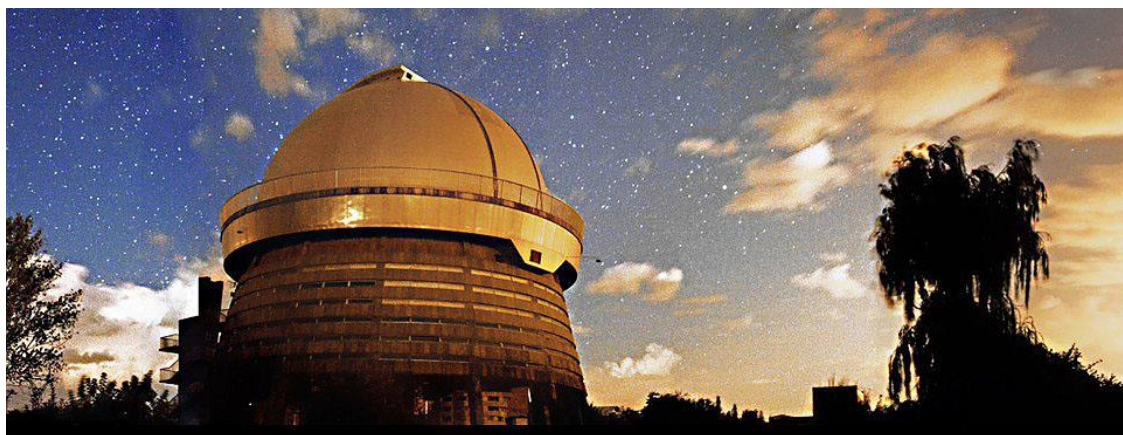
The Laboratory is aimed at digitization and study of the photographic plates of M. A. Kazaryan's survey obtained with Byurakan Astrophysical Observatory (BAO) 1m Schmidt telescope by means of 1.5° and 4° prisms. The survey covers more than 2000 sq. degree and was conducted to search for new UV-excess galaxies, blue and late-type stars, as well as detailed study of the discovered objects (Kazarian, M. A. 1979, Ap 15, 1; the catalogue of all 706 Kazarian galaxies is published in Kazarian, M. A.; Adibekyan, V. Zh.; McLean, B.; Allen, R. J.; Petrosian, A. R. 2010, Ap 53, 57, VizieR Online Data Catalog: VII/254).

The digitized data will serve as a source for new scientific research and discoveries, if only the digitized material runs according to modern standards and, due to its accessibility, it will become an active archive.

The Chair of Astrophysics was founded in 1945 by Academician Viktor Ambartsumian, who was its Head until 1994. Afterwards Misha Kazaryan (1994-2005) and Ara Avetisyan (2005-2006) were the heads of the Chair. In 2009 the chair of Astrophysics after V. Ambartsumian was merged with the General Physics. Almost all BAO astronomers have graduated from this Chair.

Emilia Karapetian

SEARCH AND STUDY OF THE EMBEDDED YOUNG STELLAR CLUSTERS



*In October 2015, there was a Call for one-year research project in 2016 for young astronomers. For the first time BAO has established research grants. The necessary conditions were that all group members should be less than 35. Total funding AMD 2,500,000 including salaries, equipment and travel. Four projects were submitted and after discussion, the Committee consisting of BAO Scientific Administration members (Director, Deputy Directors and Scientific Secretary) awarded the grant to the group of **Naira Azatyan**, **Knarik Khachatryan** and **Ani Vardanyan**. Their Scientific Adviser is **Dr. Elena Nikoghosyan**.*

The embedded young stellar clusters (not older than $\sim 3 \cdot 10^6$ years), located in the giant molecular clouds, contain statistically significant information about the process of star formation with a wide range of stellar mass (from O, B high-mass stellar objects to brown dwarfs) during the long evolutionary track (from protostars to Class II PMS objects), as well as they substantially reflect the underlying structure in the dense molecular gas from which they formed. These parameters include the density distribution, the spread of age, luminosity function. Many investigations show, there is a large number of observational data bearing a witness of consecutive and multiphase nature of star formation process. So, measurements of such fundamental parameters, as age and age spread of embedded clusters and their members, provide valuable information allowing to reconstruct star formation history and provide crucial tests for different star formation theories.

In view of the foregoing in the framework of this project, we are planning:

- Continue searching for clusters in the vicinity of massive YSOs associated with IRAS source from the foregoing list of objects using more deeper images and longer-wavelength range;
- Identify and classify evolution stage of the clusters' members;
- Determination of age and age spread of clusters' members;
- Construction of the MF - $\Psi(M) = \frac{dN}{dM} \propto M^\alpha$, and to determine value of “ α ” parameter;
- Investigation of structural properties of the clusters, revealing the pairs and triplets, as well determined there parameters (separations, periods, mass ratio and etc.).

Undoubtedly, the obtained data about stellar populations (age, age spread, ratio between evolution classes, percentage of binaries and their properties, etc.), as well the data about the cluster as whole (richness, density, size, structure, power-law of MF and etc.) need a detailed analysis of the dependence of properties of the central object or group of objects, their outflow activity and properties of environment.

Naira Azatyan

BAO YOUNG RESEARCHER'S VISIT TO INSTITUT D'ASTROPHYSIQUE DE PARIS



In the fall of 2015, by the invitation of Dr. Valérie de Lapparent, Ms. Lilit V. Barkhudaryan, a Senior Laboratory Assistant of BAO, visited the Institut d'Astrophysique de Paris (IAP) for about three months to study and collaborate with a well-known and strong team in the field of extragalactic astronomy (study of morphological and photometric properties of galaxies).

We worked on the various issues on the determination of luminosity, mass and size functions of galaxies in the Local Universe. The EFIGI (Extraction de Formes Idéalisées de Galaxies en Imagerie) catalogue, where the objects (4458 galaxies) are from the coverage of the Sloan Digital Sky Survey (SDSS), have been widely used. First, we tried to estimate the magnitude and diameter (D25) completeness of the objects in the catalogue by comparison with the HyperLEDA database. To resolve the issue, I learned and used the TOPCAT software, which is intended to merge/cross-match any big databases and catalogues. Second, I used the Source Extractor (SExtractor) software intended for the automated detection and measurement of the photometry of extended objects. I studied how to use it for bulge to disc decomposition of galaxies.



This scientific mission was a great experience for me, through which I was able to study astronomical programs, participate in numerous scientific seminars and discussions and make the new contacts with foreign scientists and students. I also had very important scientific discussions with well-known astronomers in the field: *Dr. Daniel Kunth* and *Dr. Emmanuel Bertin*. Unambiguously, the obtained experiences will be very useful for better implementation of my further scientific research in the Byurakan Astrophysical Observatory.

Lilit Barkhudaryan

24th SEAC Conference

**The Marriage of Astronomy and Culture:
Theory and Method in the Study of Cultural Astronomy**

12-16 September 2016, Bath, UK



The European Society for Astronomy in Culture is a Professional Association of scientists working in the field of Astronomy in Culture or Anthropological Astronomy, including the interdisciplinary disciplines of Archaeoastronomy and Ethnoastronomy. However, researchers in nearby fields of science like History of Astronomy, Mythology, Spatial Archaeology or Cosmology are also welcomed in the SEAC.

Conference themes consider the role of astronomy in any aspect of culture, including the arts, architecture and the built environment, literature, politics or religion. Proposals may address any time period - prehistoric, ancient, medieval or modern - or region. We are interested in current research.

As the conference title implies, we are especially interested in what theoretical models or methodological approaches do we - or can we - bring to the study of Cultural Astronomy? Speakers will be expected to be clear about their methodological approach and/or theoretical perspective in their proposals. Theory may be drawn from any of the disciplines within the humanities, social sciences or natural sciences, including, but not limited to, anthropology, archaeology, art history, cultural studies, history, literary studies or sociology. Methodological approaches may include, but are not limited to, case studies, statistical analysis, textual analysis, grounded theory, experimental archaeology, phenomenology, archival research or visual anthropology. The conference programme will be organised in panel sessions based on the kind of primary sources you are using. When you submit your paper proposal on the conference website you will choose one of the following panels: Archaeological, Ethnographical, Texts and Archives, Images, Music, Miscellaneous.

Committee

Nicholas Champion, University of Wales Trinity Saint David

Lionel Sims, University of East London

Pamela Armstrong, University of Wales Trinity Saint David

Bernadette Brady, University of Wales Trinity Saint David

Frances Clynes, University of Wales Trinity Saint David

Darrellyn Gunzburg, University of Wales Trinity Saint David

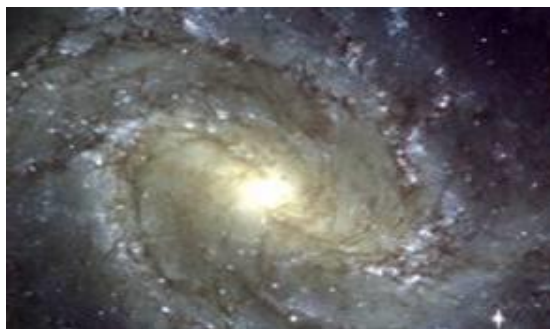
Liz Henty, University of Wales Trinity Saint David

Frank Prendergast, Dublin Institute of Technology

Fabio Silva, University of Wales Trinity Saint David and University College, London

Deadline for submitting abstracts for SEAC 2016 is the **21st March 2016**.

RELEASE OF ASTROCOURIER JANUARY ISSUE



CONTENTS

Preface - 20 years of “Astrocourier”

Anniversaries - 125th Anniversary of the Russian Astronomical Society

Chronicle of Events:

Award of Diploma of Honorary Doctor of Odessa National University after I. I. Mechnikov to Y. S. Yatskiv
On the December meeting of the Board of ASTRO

Unique scientific equipment – Kourovka Astronomical Observatory

News of the Armenian Astronomical Society

Winter School of Young Astronomers 2016

Release of new publications

Odessa Astronomical Calendar 2016

Invitation to a Conference in the Crimean Astrophysical Observatory

Memorial: memory of Yu. V. Barkin, G. S. Ivanov-Kholodnyi, I. S. Sattarova, Yu. V. Alexandrov, A. N. Dadaev

Appendix – Astrokurer 1996

Announcement of the next Issue:

The traditions of the American Astronomical Society

Ten years of the new Nizhny Novgorod Planetarium

New publications – I. S. Astapovich “Entertaining essays on meteorites”

Calendar of Conferences 2016

Astrocourier Newsletter is available at the following link:

<http://www.sai.msu.ru/EAAS/rus/astrocourier/010116.htm>

RELEASE OF NRAO NEWSLETTER



Read in February Issue of National Radio Astronomy Observatory:

- Upcoming Events
- Registration Open for Synthesis Imaging Workshop
- 1mm VLBI Pre-Announcement
- First VLBI results from the GBT at 3mm
- NAASC Workshop on Molecular Gas in Galactic Environments
- CASA Releases 4.5.1 and 4.5.2
- ALMA Program News
- 2016 Jansky Lecture Nominations
- NRAO Forges Agreement with new South African Astronomy Institute
- Recent Media Releases
- Career Opportunities
- From the Archives

RELEASE IAU ASTRONOMY OUTREACH NEWSLETTER FEBRUARY ISSU



The Astronomy Outreach Newsletter February 2016 #2 is now online. It is produced by the IAU Office for Astronomy Outreach and brings the general public the latest information about events and other outreach-related activities around the globe — and beyond. Some highlights of this issue:

- From the Editors
- IAU receives prestigious Edinburgh medal
- Vacancy for an astronomer at IAU — Office of Astronomy for Development
- 2016 Indonesia Total Solar Eclipse Astronomy Volunteer Outreach Program
- IAU National Outreach Contact Corner — News from Indonesia
- XV Latin American Regional IAU Meeting (LARIM 2016)
- Mitaka software
- Save the dates for Global Hands-on Universe 2016 in Norway
- Join ESO's first social media gathering
- Meetings & global events around the world for 2016
- Contributions to IAU Outreach Newsletter for 2016

Links

- [Outreach Newsletter 2016 #1 \(January 2016 #1\)](#)
- [Outreach Newsletter 2016 #2 \(January 2016 #2\)](#)
- [Past Outreach Newsletters](#)

Contacts

Sze-leung Cheung
IAU Office for Astronomy Outreach
Tel: +81-(0)422-34-3896
Email: cheungszeleung@iau.org

ASTRONOMICAL CALENDAR OF MARCH

Monthly Calendar of Astronomical Events
MARCH 2016

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	1	2 Lunar crescent (last quarter)	3 Martik Hovhannissian's 60th anniversary	4	5	6
7	8 Jupiter at opposition	9 New Moon Total Solar Eclipse	10 Conjunction of Mercury vs. Neptune	11	12	13
14	15 Lunar crescent (first quarter)	16	17	18	19	20 Conjunction of Venus vs. Neptune Vernal Equinox
21	22	23 Full moon	24	25	26	27
28	29	30	31 ArAS Newsletter #90 release			

LUNAR PHASES OF FEBRUARY

