

H•A•D NEWS

The Newsletter of the Historical Astronomy Division of the American Astronomical Society

Number 82 * April 2013



Sessions, Transition in Long Beach Joseph S. Tenn, Sonoma State University

The January HAD/AAS meeting was a great success. Sunday saw special sessions "Making Astronomy Public, Los Angeles Style," organized by Peter Abrahams, Thomas Williams, and David DeVorkin, and "Preservation of Astronomical Heritage and Archival Data," organized by Wayne H. Osborn and Jim Lattis.

Monday's third special session was a first: a joint session with the High Energy Astrophysics Division (HEAD), organized by Hale Bradt and Richard Rothschild. Titled "Fifty Years of Celestial X-ray Astronomy," it featured 17 pioneers of x-ray astronomy split into three panels. Each astronomer spoke for just two minutes and then participated in a lively panel discussion. The reminiscences were fascinating. The entire program was recorded and can be watched online. Just click on "Videos" from the page http://had.aas.org/meetings/2011-13.html.

The Astronomy Genealogy Project

Joseph S. Tenn, Sonoma State University

Many people find genealogy fun. Tracing your ancestry can reveal all kinds of interesting information. Academic genealogy can be at least as much fun, and it can even make a small contribution to the historical record. Your academic parent is the person who supervised your doctoral dissertation. A generation can be as short as a year or two or more than half a century.

The Mathematics Genealogy Project (http://genealogy.math.ndsu.nodak.edu) was founded in 1996. Now based at North Dakota State University and run by Mitchell Keller, it contains the names of 169,024 "mathematicians" as of 21 March 2013. Take a look and you will see the reason for the quotation marks. As the introduction states, "Throughout this project when we use the word 'mathematics' or 'mathematician' we mean that word in a very inclusive sense." There are many physicists and more than 1000 entries whose "math subject class" is listed as "astronomy and astrophysics." Finding my academic grandfather (a physicist, like me) and his ancestors already listed, I added my academic father and myself. You can now trace my ancestry back a very long ways if you are so inclined.

Now we are starting the Astronomy Genealogy Project, to be known as "AstroGen." It will be hosted on the AAS website, and I will direct it initially. We are enormously grateful to

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continued on p. 11



From the Chair Jay M. Pasachoff, Williams College

It is an honor to serve as Chair of the AAS Historical Astronomy Division, and I will do my best to forward its aims over the next two years.

Our normal HAD meetings will be joint, as usual, with the main AAS meetings, next during 5-9 January 2014 in the new Gaylord National Resort & Convention Center outside Washington, DC, in National Harbor, MD; and during 4-8 January 2015 in Seattle. [I'm not too fond of the idea of our meeting at an isolated place an hour's travel from downtown DC, but that's the way our AAS officers have arranged things-no doubt to save money. I saw in the paper last week that even the big Republican convention was at that Gaylord Convention Center, for whatever that's worth. And the January AAS meetings will be at other Gaylords: in 2016 in Kissimmee, Florida; in 2017 in Grapevine, Texas (!; near DFW airport); and back in National Harbor in 2018. It will be a far cry in pleasantness and desirability in location from the first AAS meeting I attended, in Nantucket, in June 1961, while I was an undergraduate.]

During my term of office, I am trying to broaden our reach for the Historical Astronomy Division. We have arranged to have an additional meeting on 6-11 October 2013 in Denver, jointly with the Division of Planetary Sciences of AAS, an organization that has perhaps 2000 attendees who mostly do not overlap with those who attend the AAS January meetings. The specific sessions are not yet organized, and we would be glad to hear from any of you who intend to come and/or who would like to participate or even organize a session. Abstracts will be due on July 18.

After that, we are trying to arrange some joint sessions with the Solar Physics Division, which

will meet in June 2014 jointly with the AAS summer meeting in Boston.

I hope that the IAU meeting to be held in Honolulu during August 2015 is on everyone's radar screen. We certainly hope to be able to collaborate with IAU's historically minded people on some sessions there.

It has been a pleasure for me to continue to work with Joe Tenn, who among his many contributions to HAD capably edits and puts out this newsletter. My wife and I look forward to contributing some book reviews to it.

And I am glad to start to work with our new Vice Chair, Marc Rothenberg, a professional historian of astronomy. I think, and hope, that it is good that we have some alternation between research astronomers with an interest in history like me and professional historians of science like Marc. We can learn from each other.

I will try to help organize some excursions or rare-book-library visits in relation to our HAD meetings. For example, after the Long Beach, California, meeting of a few months ago, a group of us (Sarah Schechner, Ken Launie, and Elizabeth Griffith) visited the Hale Solar Laboratory, built on the flats of Pasadena near San Marino in about 1923 when Hale himself could no longer go up the mountain. The coelostat/tower/pit, said to be a twin of those at the 150-foot solar tower on Mt. Wilson (which can be seen from the property), is still operable, and was set up for us on a later visit by Don Nicholson, who was a boy when it was built and who, at age 95, recalled for us his childhood meetings with Hale and Hubble. His friend Gale Gant also participated in opening the coelostat and dome-which required, to close it at the end of the visit, working with the most formidable wall of high-voltage relays that I have ever seen. The building still contains some plates and papers (and an unopened box of Kodak spectroscopic N plates that expired in 1939). The architects who now own the Hale Solar Laboratory, which came to them as part of their adjacent house, have been very cooperative in allowing access and in being open for suggestions for preservation, which is an important part in general of their architectural practice.

I look forward to seeing many of you in and near Washington, DC, in January, and I hope at least some of you in Denver in October.



From the Vice Chair Marc Rothenberg, National Science Foundation

I want to thank the membership of the Historical Astronomy Division for the honor of electing me as Vice-Chair. Of course, my major responsibility is oversight of the obituaries. Chair Jay Pasachoff has done a wonderful job during his term as Vice-Chair and has left the files in excellent shape. My challenge is to ensure that the obituaries produced in the future continue to be at the current high level of usefulness to both those who knew the deceased and to future historians.

As one of the co-founders of the Biennial History of Astronomy Workshops at Notre Dame, I want to take this opportunity to recommend the Workshop to HAD members. Please see the article on this year's meeting on p. 7.

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From the Secretary-Treasurer Joseph S. Tenn, Sonoma State University

By now most HAD members are aware that I have been on a long term project to expand the HAD website. The section on meetings contains links to abstracts of all history papers presented at AAS meetings since HAD's founding in 1981, while other pages include descriptions of all those honored with the Leroy E. Doggett Prize for Historical Astronomy or the The Donald E. Osterbrock Book Prize for Historical Astronomy. As described in the newsletter last year, I have been expanding the section, begun some years ago by Brant L. Sponberg and David H. DeVorkin, on the history of the American Astronomical Society. The descriptions of the first 87 AAS meetings have not been revised, but I have added the group photos taken at almost all of them. This has been made possible by the work of Yerkes Observatory volunteers Wayne H. Osborn and Richard Huttas, who have done most of the scanning. The page of links to Some History of Astronomy Online Resources is intended to be a valuable reference for anyone doing research in historical astronomy. Suggestions for additions are always welcome.

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The HAD Oral History Initiative

Jarita Holbrook, University of the Western Cape, Republic of South Africa

The HAD Oral History Initiative is a collaborative effort of HAD members to increase the number of interviews with astronomers in the American Institute of Physics Oral History Archive housed at their Neils Bohr Library and online. Thank you to the five volunteers that now populate the HAD Oral History Initiative interview team. We are making quick progress towards the completion of the grant application to the American Institute of Physics. We are currently revising the interview protocols from those suggested on the AIP website http://www.aip.org/history/oral_history/questions.ht ml. Our interview team has begun to contact the astronomers that they plan to interview and the list is quite impressive.

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Future HAD Meetings

2013 October 6–11, Denver [with DPS]

2014 January 5–9, National Harbor [with AAS]

> 2014 June 1–5, Boston [with AAS & SPD]

2015 January 4–8, Seattle [with AAS]

2015 August 3–14, Honolulu [with IAU & AAS]

Special Sessions Scheduled for January 2014 Meeting

The following paragraphs are from the organizers of the special sessions to be presented by HAD Sunday, 5 January 2014. The sessions will be held either at the National Air & Space Museum in Washington or at the same site as the rest of the meeting in nearby National Harbor, MD.

Why is There Something Rather than Nothing?

The theme of this session is the history of attempts to understand the how and the why of the origin of structure in the universe. The topics are expected to include the contribution of early photographic astronomy to the discovery of structure; Fritz Zwicky and cold dark matter; Beatrice Tinsley and the effect of galactic evolution on observational cosmology; what deep sky surveys told us about the origin of cosmic structure; and finding the origin of structure in the cosmic microwave background. Suggestions for the session are welcomed by the organizer, Simon Mitton, (sam11@cam.ac.uk).

From Barnard's Star to the Kepler Mission: Searching for Low Mass Companions to Stars

One of the signal advances in astronomy in the last 25 years has been the discovery of extrasolar planets. Since 1995 more than 400 have been discovered with ground-based radial velocity and optical transit methods. Since 2009 the Kepler spacecraft has announced 2,740 planet candidates, including 461 at the last AAS meeting in Long Beach. Of the Kepler discoveries 351 are candidate Earth-sized planets, and 816 are candidate super-Earths (1.25-2 Earth radii).

Speakers in this session, organized by David DeVorkin, (DeVorkinD@si.edu), and Steven Dick, (stevedick1@comcast.net), will examine the role of applying new technologies, hardware and software, scientific and cultural, to the search for planets in the universe. Speakers will identify what the limits of detection have been over the past century, and how these limits have been extended to the point where humanity seems now on the verge of actually finding habitable abodes of life circling other stars. Speakers who have been participants in the process will discuss their strategies and modes of operation, and what they feel are the key artifacts of the material heritage of the process that should be preserved to better record and appreciate this stage in the search for life in the universe.

Blurring the Boundaries among Astronomy, Physics, and Chemistry: The Moseley Centenary*

Virginia Trimble, University of California, Irvine

The year 2013 has some wonderful anniversaries. It is Wagner's 200th birthday and the sesquicentennial of the International Red Cross, the London Underground, and the US National Academy of Sciences. Among the centenaries are those of the New York Armory Show (which brought modern art to the USA), the premiere of Stravinsky's Rite of Spring (arguably the starting point of modern music), the Bohr atom (which began the takeover by physics of what had been chemistry), the adoption of the 16th amendment to the US constitution (which gave Congress the power to tax incomes), and the first of two papers by Henry Moseley (reporting values of atomic number, Z, for many elements and showing that Zis more fundamental and useful than atomic weight, A). We are also celebrating the 50th anniversary of the discovery of quasars, which gave birth to the Texas Symposia on relativistic astrophysics (also celebrating their 50th with a meeting in Dallas on 9–13 December 2013).

The focus here is only Moseley's work and its significance as part of a process where one science invades and partially takes over another.

A BIT ABOUT MOSELEY



Henry Gwyn Jeffreys Moseley was born in Weymouth, England on the 23rd of November 1887. He earned a second-class degree in physics from Oxford in 1910 and went on to Manchester to work with Rutherford, receiving an M.A. a couple of years later. He did not live to earn a

Ph.D. When England entered World War I, Moseley insisted on a commission, which he was given in the Royal Engineers telecommunications section. His family seems to have supported him in this decision; although his biologist father, Henry Nottidge Moseley (1844–1891), did not participate in any wars, he was part of the 1872–76 Challenger Expedition. Many other British, French, German, and Russian scientists also served on the front lines in World War I, and some lived to tell the tale, including Rudolf Minkowski. But Moseley was sent to Gallipoli in April 1915, was shot in the head by a "Turkish" sniper while telegraphing military orders, and died on 10 August 1915.

In the narrow interim between bachelor's degree and volunteering, Moseley published two critical papers. What he had done was to prepare solid plates of as many elements as possible from Al to Au (with KCl serving for both potassium and chlorine) and fire energetic electrons (cathode rays) at them. This kicks electrons out of the lower Bohr orbits, so that the fallback emits K-alpha and L-alpha X-rays. He used a Bragg crystal spectrometer to measure the wavelength, frequency, or energy of those X-rays, showing that the energies were proportional to Z^2 where Z was usually, but not always, the number of the element in the periodic table, counting from H = 1.

Moseley's work sorted out pair reversals, like (Te, I) and (Ni, Co) that had appeared backwards when ordering by atomic weight; improved the ordering of the rare earths, and found amounts in several mixtures; demonstrated that a supposed sample of Z = 43 was nothing of the sort; showed that there was no room for hypothetical elements like coronium, nebulium, aldebarium, asterium, and cassiopeium, and concluded that there were only three gaps between Al and Au, at Z = 43, 61, and 72.

It was later work by others that found U (Z = 92, Manne Siegbahn), determined Z's lower than Al (Z = 13, Chadwick), demonstrated the existence of isotopes (Soddy), and, much later, produced a neutral nuclear particle, the neutron (Chadwick again). This last made clear the essential correctness of Prout's hypothesis, that atoms of all the other elements could be thought of as made up of integral numbers of hydrogen atoms.

IMPLICATIONS SHORT AND LONG TERM

Moseley and Bohr began a process of the takeover by physics of what might have been supposed to be chemistry, A 1918 history of chemistry certainly implies that the composition of atoms and nuclei is part of the subject. And my father (Lyne Starling Trimble, 1912–1992, B.S. in chemistry from UCLA in the class that also included Glenn T. Seaborg and the father of David H. DeVorkin) thought until his dying day that these topics should have been part of chemistry. Recently a distinguished colleague from the chemistry department told me that he did not think that Bohr orbits had been a good thing either.

From an astronomical point of view_s on the other hand, cleaning up the periodic table laid the foundations, first, for systematic studies of abundances in meteorites and the sun (though Aston, 1924, who measured many atomic masses and abundances, didn't much like the patterns he saw) and, second, for the understanding of "the synthesis of the elements in stars" in 1957 by Cameron and by Burbidge, Burbidge, Fowler, and Hoyle.

This is not to say that astronomers have always welcomed the methods of either chemistry or physics into their observatories, from the report of sodium in the sun (Bunsen and Kirchhoff), through helium in the sun (Lockyer, Ramsey), and on to Cecilia H. Payne's 1925 demonstration from the spectra of the dominance of H and He in the atmospheres of K giants, using the Saha equation. Notorious cases are George Airy and Simon Newcomb, who felt that the proper business of astronomy was to measure time, positions, and proper motions for navigation purposes. Airy seems to have held to this in all his tasks, while Newcomb took a much broader interest in astronomy and other sciences in his nontechnical writing.

It is not in any sense an original idea to say that, as a rule, those who have welcomed ideas and methods from other sciences have generally been more successful and longer remembered than the fence-builders. The obvious modern example is the trespassing on astronomical territory by physicists carrying strings, topological defects, branes, and multiverses with them. Probably, instead of shouting "untestable," "not science," and so forth we should say "welcome, " and please keep us posted from time to time on where you have got to.

*A longer version of this paper with full references appears in *Bulletin of the Astronomical Society of India* **40** (4), 465-486 (2012). http://www.ncra.tifr.res.in:8081/~basi/12Dec/Abstr acts/virginia.htm. The author particularly recommends the books by F.J. Moore, E.R. Scerri, and B. Nath cited there.



Jim Burke, Mikhail Marov, Joe Alexander, Jim Green, Torrence Johnson, Wes Huntress, Scott Hubbard, Bob McNutt, Steven Dick, Ed Stone, Bob Fahrquar.

Solar System Exploration at Fifty Steven Dick

The imagery from all corners of the solar system garnered over the last 50 years has been nothing short of astonishing. To commemorate the 50th anniversary of the first successful planetary mission, Mariner 2 to Venus, on October 25-26, 2012 the NASA History Office, in conjunction with NASA's Science Mission Directorate, the Jet Propulsion Laboratory and the National Air and Space Museum, hosted a symposium on Solar System Exploration at 50. The event was held at the Lockheed Martin Global Vision Center in Arlington, Virginia, just outside Washington, DC.

Covering the history of planetary exploration during the last 50 years, the meeting was notable for its interaction among scientists who actually participated in the events, and historians and space policy experts who have analyzed them. Among the historians and policy speakers were Peter Westwick (keynote), Erik Conway, Arturo Russo, Michael Neufeld, Dwayne Day, John Logsdon and Harry Lambright. Among the space scientists were James Burke (Ranger project), Ed Stone (Voyager project and former JPL Director), Torrence Johnson (Voyager, Galileo and Cassini), Mikhail Marov (Venera landers), former NASA Associate Administrator for Space Science Wes Huntress, Chas Beichman (extrasolar planets), and current Planetary Science Division Director Jim Green. At a ceremony during the meeting, 11 attendees received awards "in recognition and appreciation of leadership towards solar system exploration and discovery" (see image above).

The full program, including slide presentations and a YouTube video, may be found at <u>http://www.nasa.gov/topics/history/features/SSEat50.html</u>. A *Proceedings* of the event is in process.

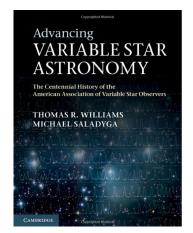
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History of the AAVSO Now Available in Print Thomas R. Williams

In 2011, the American Association of Variable Observers (AAVSO) celebrated Star the centennial of its formation. Two publications resulted from that celebration. Cambridge University Press regarded the event as important enough to publish a full book on the subject: Advancing Variable Star Astronomy: The Centennial History of the American Association of Variable Star Observers by Thomas R. Williams

and Michael Saladyga. Less likely to be known to HAD members is a volume of the *Journal of the AAVSO* (vol. 40 no. 1 parts A and B) also devoted to the celebration.

Two meetings of separate astronomical associations devoted full sessions to the history of the AAVSO. A joint meeting, in Boston in May 2011, of the American Astronomical Society and the AAVSO, featured history sessions sponsored by both the AAS-HAD and AAVSO. In the scientific sessions of that AAS meeting, a number of papers and posters also discussed various historical aspects of variable star astronomy. In the fall of 2011, the Centennial Annual Meeting of the AAVSO also included several history sessions. The relevant papers from these two meetings are published together in the *JAAVSO*. These two amply illustrated volumes, edited by John Percy, Matthew Templeton, and Thomas R. Williams, are available as print-on-demand books from Amazon.com.



Individual sessions included eight papers on Women in Variable Star Astronomy; nine papers on Variable Stars in Theory and Practice; seven papers on the History of Variable Star Organizations around the world; and nine papers on Variable Star Observers, Programs and Supporters. The Scientific Papers Sessions included 57 papers and posters on various aspects of current variable star astronomy in addition to a special session of 14 Invited Review Papers on the history and status of various classes of variable stars presented by specialists in each field.

The fall meeting closed with a banquet at which astronomer/historian Owen Gingerich offered a closing address. A member of AAVSO since 1947, Dr. Gingerich was accepted into membership and submitted his first observations even though he failed to meet the minimum age requirement. For the banquet, Dr. Gingerich summarized a century of highlights in astronomy and described how variable stars have played a role in that history; he added his predictions of several important developments to be expected for the next fifty years. One additional highlight of the meeting came through the participation of Dr. Martha Stahr Carpenter, three-term president of the AAVSO from 1951 to 1954 during which the AAVSO's longer term existence was threatened by its eviction from Harvard College Observatory.

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Notre Dame Workshop XI: Diffusion of Astronomical Knowledge

Christopher M. Graney, Jefferson Community & Technical College

The Eleventh Biennial History of Astronomy Workshop will be held June 12–16, 2013, at the University of Notre Dame in South Bend, Indiana, and at the Adler Planetarium and Astronomy Museum in Chicago, Illinois. The first of these conferences took place in 1993 at the University of Notre Dame, launching what has become a stimulating forum for scholars of all levels and interests in the history of astronomy.

The 2013 History of Astronomy Workshop has a full schedule of scholarly papers that will be presented at both South Bend and Chicago (registration includes bus transport between Notre Dame and the Adler), yet it also includes a session on the teaching of the history of astronomy, thus continuing a tradition of including a teachingoriented focus at the Workshop. The Workshop has a residential format (on the Notre Dame campus), so participants have many opportunities outside of the scheduled meetings to meet and converse with other participants with whom they might not normally have a chance to interact to such an extent. The Workshop features plenty of food and a friendly collegial atmosphere that is welcoming to newcomers and highly regarded scholars alike.

The theme of this year's conference is the **Diffusion of Astronomical Knowledge across and within Cultures.** It is a well recognized phenomenon that astronomical ideas, theories, and data have historically crossed cultural and disciplinary boundaries. Here "diffusion" is understood to be a broad category: How did

astronomical theories pass from one culture to another? What ideas expressed in one language or worldview were modified when passing into another system? How do subcultures within a single broader culture, such as professional and amateur within the same geographical region, interact? How do new discoveries make their way through a scientific community, and how do they eventually get rejected or accepted? How does knowledge pass from specialists to the broader popular culture? How do instruments play a role in transferring and shaping knowledge, especially as they pass between cultures?

The invited speaker, F. Jamil Ragep, has written extensively on the history of science in Islam and has co-edited books on the transmission of science between cultures. He is Canada Research Chair in the History of Science in Islamic Societies and Director of the Institute of Islamic Studies at McGill University in Montreal, Canada. Thanks to a grant from the Canada Foundation for Innovation and the Quebec government, Ragep is leading an international effort to catalogue all Islamic manuscripts in the exact sciences and provide a means to access information online on the intellectual, institutional, and scientific contexts of these texts. In association with the Max Planck Institute for the History of Science in Berlin, he is co-directing a project to study the fifteenth-century background to the Copernican revolution and in particular its Islamic sources.

Please consider attending. Details, including registration information, are available at http://www.nd.edu/~histast/.

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Book Review

Jay Pasachoff, Williams College

Catchers of the Light: The Astrophotographers' Family History by Stefan Hughes

It is rare to find a magnum opus in astronomy that is so detailed, so interesting, and so expert over a wide range that it is hard to carry across the magnificence of this work. It is now available as an eBook in three formats and will be available in print within months. Various ordering and pricing options are available at its website: http://www.catchersofthelight.com. Stefan Hughes, who has a Ph.D. in astronomy, has obviously devoted years to amassing not only written information but also a wide range of images related to the history of photography. There seems to be an image or two on almost every page. The images are not only pictures of the people and of the astronomical objects they photographed but also of a wide range of things related to their lives: their houses, plaques devoted to them, and so on. Each of the many dozens of people whose work and lives are described becomes a story to be told.

The book is divided into 9 parts—separate sections, for example, about photography of the moon, the sun, stars, spectra, planets and comets, as well as sections about the Carte du Ciel project, astrographs, and amateur astrophotography—and is followed by appendices, a glossary, a timeline, and a "family pedigree" for each person. (Though I admit that a computer search for the subject of my next paragraph in the pdf version worked very well, I am pleased to report that an index will soon be added). Each of the sections has references, so Hughes's various statements can be checked by those wishing to.

To choose one subject not at random, since it is one I know quite a bit about, I turned to Hughes's section about William Usherwood, who was the first person (beating Bond at Harvard out by a day) to photograph a comet, as my colleagues and I described in a journal (Pasachoff, Roberta J. M. Olson, and Martha L. Hazen, 1996, "The Earliest Comet Photographs: Usherwood, Bond, and Donati 1858," J. Hist. Astron. 27, 129-145) and in a book (Olson, Roberta J. M., and Pasachoff, 1998, Fire in the Sky: Comets and Meteors, the Decisive Centuries, in British Art and Science, Cambridge University Press). We were quite proud to have tracked down the little-known Usherwood and to have figured out where he had lived and worked. I am amazed to see that Hughes, in his section about Usherwood (pp. 363–386) not only included all our findings (properly crediting us) but also found him in census reports, discovered his life history and his father's occupation, described his wife and the church in which they were married, and related his work to Donati and his comet and to the runner-up in comet photography, Harvard director George Phillips Bond. Even Usherwood's wedding announcement and a picture of his grave are included! Unbelievable!

I have the eBook loaded onto my iPad, and it could give me as many hours of reading as I choose. I haven't even found any typos, rare for me.

In sum, I highly recommend this idiosyncratic whatever-it-is to all with an interest either in the history of astronomy or in the history of photography.

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Thank You, Donors

Joseph S. Tenn, Sonoma State University

The Historical Astronomy Division is greatly dependent on donations. The LeRoy E. Doggett Prize for Historical Astronomy and Donald E. Osterbrock Book Prize for Historical Astronomy are funded entirely by generous supporters.

Thank you to Bella C. Chiu, Stephen C. McCluskey, Joseph P. Mutschlecner, Elizabeth "Pat" Roemer, Woodruff T. Sullivan III, and Virginia L. Trimble for donating \$25 or more to the HAD fund in 2012. Your donations will help HAD continue to provide exciting meetings and grants to speakers and graduate students.

No one donated as much as \$25 to the Doggett Prize Fund last year.

The Osterbrock Prize Fund received donations of \$25 or more from Reginald Dufour, Arnold M. Heiser, Donald H. Liebenberg, Gordon M. MacAlpine, William S. Penhallow, Elizabeth "Pat" Roemer, Michael L. Sitko, Joseph S. Tenn, and Robert F. Wing in 2012.

Thank you to all. Our long-term goal is to make each prize self-sustaining, with costs covered by interest. We are still a long ways from this goal, but every bit helps.



Minutes of HAD Business Meeting 7 January 2013, Long Beach, CA

I. The meeting was called to order by chair Jarita Holbrook.

The minutes of last year's meeting, available online as part of HAD News #80, were approved. Current (2011–13) officers were introduced. These were vice chair Jay Pasachoff, secretary-treasurer Joe Tenn, and committee member Wayne Osborn. Past chair Tom Hockey and committee member Richard Jarrell were absent.

II. Secretary-Treasurer's Report

The year's activities and membership were reviewed, as well as finances for the year 2012. Audited totals for the year are posted below. It was pointed out that 23% of HAD members have emeritus status, and most of these are not required to pay dues. With more meetings and special sessions, the treasury is slowly being depleted. A motion was made and passed to increase the member dues to \$15 per year effective in 2014, which means that affiliate members will pay \$20, since they are required to pay the \$5 the AAS charges the Division to adminster their memberships. It was also agreed that emeritus members would be encouraged to donate to HAD and its prize funds.

The presentation included information on the HAD website and newsletter and outgoing and incoming officers., as well as membership, which has remained quite close to 300 for several years.

Statistics regarding recent meetings were presented, and future meetings were announced.

III. Committee Reports and ongoing HAD Activities

A. Obituary Committee

The Vice Chair (Pasachoff) described the task of preparing obituaries of all deceased AAS members. These now appear on the AAS website Currently the easiest way to find them is to go to the list at <u>http://had.aas.org/obits.html</u>. Each year the HAD vice chair depends on members to inform him or her (usually via the AAS) of the demises of AAS members and seeks volunteers to write the obituaries.

B. HAD Prize Committee

In the absence of Prize Committee chair Thomas Hockey, HAD chair Jarita Holbrook announced that the recipients of the 2013 Osterbrock Prize, Harvey and Victoria Bricker, would receive their prize and present a lecture at the HAD session that afternoon. Members were asked to nominate individuals for the LeRoy E. Doggett Prize for Historical Astronomy by 1 March 2013.

C. The HAD Booth

For the second year in a row, thanks to the generosity of Irene Osterbrock, history of astronomy books from the library of Donald Osterbrock were given away at the booth to those who promised to either join HAD or make a donation to one of the HAD accounts. As in previous years, the booth was staffed by volunteers from the HAD membership. Arnold Heiser solicited more volunteers.

IV. New Initiatives

Two new iniatives had been discussed and endorsed by the HAD Committee.

A. Oral History Interviews

Jarita Holbrook presented this project, which is further described on page 3.

B. Astronomy Genealogy Project

Joe Tenn presented this project, which is further described on page 1.

V. Changing of the Guard

Outgoing chair Holbrook thanked those committee members who had completed their terms—Tom Hockey, who had served six years as vice chair, chair, and past chair, and Richard Jarrell and Wayne Osborn, who had served on the HAD committee for two—and introduced new committee member Linda French. New vice chair Marc Rothenberg and the other new committee member, Wayne Orchiston, who was in the midst of moving from Australia to Thailand, were not present.

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Treasurer's Report

HAD Account Balance 12/31/11		14.345.56
Income 2012		14,040.00
Dues	2304.00	
Contributions	750.00	
Interest	494.66	
	434.00	+3,548.66
Expenses 2012		.0,040.00
Speakers at meetings	-1250.00	
Booth	-25.00	
Student travel award	-500.00	
Officer travel	-500.00	
Newsletter	-38.47	
Recruitment	-33.66	
Fund raising	-9.60	
Election	-9.00	
AAS fees	-218.90	
Affiliate member fees	-218.90	
TOTAL EXPENSES	-170.00	2 764 65
INVESTMENT VALUE CHANGE		-2,764.65 +946.24
Balance 12/31/12		16,075.81
Balance 12/31/12		10,075.01
Doggett Prize Fund		
Balance 12/31/11		31,285.39
Income 2012		
Contributions	17.00	
Interest	1,063.54	
TOTAL INCOME		+1,080.54
Expenses 2012		
Certificate	-425.64	
Honorarium	-1,000.00	
Recipient's travel	-1,478.72	
HAD Expenses	-73.86	
AAS fees	-179.12	
TOTAL EXPENSES		-3,157.34
INVESTMENT VALUE CHANGE		+2,034.43
Balance 12/31/12		31,243.02
Osterbrock Prize Fund		
Balance 12/31/11		13,500.87
Income 2012		13,500.07
	1.169.00	
Contributions	,	
Interest TOTAL INCOME	465.53	14024 52
		+1634.53
Expenses 2012 Certificate	220.00	
	-220.00	
AAS fees	-42.43	262.42
TOTAL EXPENSES		-262.43
INVESTMENT VALUE CHANGE		+890.51
Balance 12/31/12		15,763.48

Long Beach Meeting

continued from p. 1

The best attended HAD sessions were the ones featuring contributed papers on Monday and Tuesday afternoons.

The former was highlighted by the presentation by HAD Chair Jarita Holbrook of the second Donald E. Osterbrock Book Prize for Historical Astronomy to Harvey and Victoria Bricker (pictured on p. 1) followed by the Brickers' beautifully-illustrated lecture on "Astronomical Records in the Hieroglyphic Writings of the Precolumbian Maya."

Abstracts of all presentations, including the poster papers, may be found on the HAD website.

There was also the sixth HAD minibanquet, held at George's Greek Cafe, the site of the second in 2009. As before, the food was delicious, and a good time was had by all.

At the HAD Business Meeting the members present voted to increase the annual dues to \$15 (\$20 for affiliate members) beginning in 2014. Members attending also learned of two new HAD initiatives, the Oral History Project, led by Jarita Holbrook, and the Astronomy Genealogy Project, led by Joe Tenn. The meeting concluded with the traditional handing over of the gavel and the "Ich bin HAD!" plaque from the outgoing chair, Jarita Holbrook, to the new chair, Jay Pasachoff (pictured on p. 9).

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AstroGen

continued from p. 1

Mitch Keller, who has shared with us all the software used in the MGP, and to AAS Executive Officer Kevin Marvel for authorizing both the use of the website and the extremely valuable assistance of Scott Idem, AAS Director of Information Technology. This will be a big project and it will necessarily start slowly. There are many decisions to be made before we solicit entries. Please contact me if you would like to participate. We are especially seeking people with expertise in languages and in tracking down such information as old dissertations or their titles.

Stories About Astronomers

Helmut A. Abt, Kitt Peak National Observatory

Astronomers have excellent senses of humor. In the past, theirs was a small community where virtually each one knew all the others personally. Unfortunately, most of the astronomers in these stories have left us; for the remainder I got their permission to have these stories included. All these stories are true to my knowledge.

Helmut Abt's Broken Arm

One day George Backus came back to Yerkes Observatory from the Univerity of Chicago campus where he had just passed his Ph.D. final exam. He brought a bottle of wine and insisted that all the dinner guests in Mrs. Van Biesbroeck's rooming house toast him. Helmut Abt, a teetotaler, took a polite sip. After dinner on the way to the Observatory, Helmut slipped on the ice and broke his arm. No one would believe that he wasn't stinking drunk.

Payment to Referees

Helmut gave a talk to a society of the editors of the 60 scientific journals produced in Shanghai. In the question session he was asked how much do American journals pay their referees? He said, "Nothing. They expect the referees to help other authors improve their papers in exchange for others having helped the referees improve theirs. We would consider paying referees too capitalistic a system for us." To which the Chinese replied, "We find your system to be too communistic for us."

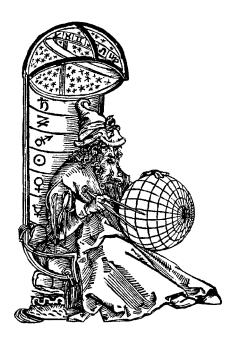
Walter Adams in the Washroom

Walter Adams was Director for many years of the Mt. Wilson Observatory, a part of the Carnegie Institution of Washington. He prided himself on staying within his budgets and even returned small amounts to Carnegie. Once he attended a meeting in Washington of the directors of the various Carnegie Institutions. In the men's room he mentioned to another man that the men's room was very luxurious with marble walls and expensive fixtures. The other man, not knowing Adams, said, "You won't believe this, but there is an old director in California who returns some of his budget every year, so that is why they can afford this.

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Editor's note: There will be more in future issues.



Historical Astronomy Division of the American Astronomical Society

HAD News #82, April 2013, edited by Joe Tenn Please send contributions for the next issue, comments, etc. to joe.tenn@sonoma.edu.

A complete version of this newsletter, with color photographs and active links, may be found on the HAD website at <u>http://had.aas.org/</u>.

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