

# H-A-D NEWS

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

Number 75 \* October 2009



Michael J. Crowe Awarded the 2010 LeRoy E. Doggett Prize Sara Schechner, Harvard University

It is a great pleasure to announce that Michael J. Crowe is the 2010 recipient of the LeRoy E. Doggett Prize for Historical Astronomy. The Prize is awarded by the Historical Astronomy Division of the American Astronomical Society to an individual whose long-term efforts and lifetime achievements have had significant impact on the field of the history of astronomy. The 2010 LeRoy E. Doggett Prize is presented to Professor Crowe in recognition of his research, teaching, and outreach.

Michael J. Crowe is the Reverend John J. Cavanaugh Professor Emeritus in Humanities in the Program of Liberal Studies and Graduate Program in History and Philosophy of Science at the University of Notre Dame. Professor Crowe earned a B.A. in the Program of Liberal Studies and a B.S.

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We Are Meeting in Washington

The Historical Astronomy Division will meet jointly with its parent organization, the American Astronomical Society, in January 2010.

HAD sessions will take place 3–5 January, while other AAS sessions will continue through 7 January. More information about the meeting may be found at http://aas.org/meetings/aas215/.

This year HAD will present one special session of invited talks, the Doggett Prize Lecture to the entire AAS, three sessions of contributed oral presentations, and one session of contributed poster papers.

The full schedule, with abstracts of all papers, is at http://www.aas.org/had/meetings/.

The special session is **the First Century of Astronomical Spectroscopy**, organized by HAD
Secretary-Treasurer Joe Tenn.

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From the Chair Thomas Hockey, Univ. of Northern Iowa

I mourn the death of cultural astronomer and historian John David North (1934-2008). He was a hero of mine.

North was interested in everything from archaeoastronomy to medieval astronomy to modern astrophysics. He was a generalist, something which I have aspired to be.

This probably is not the way to build a career in the history of astronomy. As in most other disciplines, the best move is to specialize in a narrow period, place, or topic. However, I have never been able to do that.

Apparently, neither could North. Yet he became chair of the Department of History of Philosophy and Exact Sciences at the University of Groningen and later a Dean. Outside that prestigious institution he perhaps is known best for his Cosmos: An Illustrated History of Astronomy and Cosmology (2008), which I consider to be superior to the Cambridge Illustrated History of Astronomy.

Not that I agreed with everything North did. I think that his book on Stonehenge is bizarre. Yet its emphasis on three-dimensional interpretation of archaeological sites got me to think, if only in rebuttal. And, to me, that is the hallmark of a darn good book.

I never met John North, last of the generalists. He did not travel much, and I do not get to Europe often. I do expect to one day meet his legacy—his students.

With my Chair's duties I will not be organizing the HAD Booth at the Washington meeting, but someone else will. Please consider volunteering to help.

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From the Vice Chair

Jarita Holbrook, University of Arizona

In August, I attended the ASTRONOMY AND WORLD HERITAGE: ACROSS TIME AND CONTINENTS conference in Kazan (Tatarstan), Russia. The conference was one of many International Year of Astronomy events with the motto "The Universe: Yours to Discover". I am the chair of the IYA2009USA Cultural Astronomy and Storytelling group in addition to my duties as Vice Chair of HAD. My invited talk, "Indigenous Astronomy and Its Heritage," presented sites around the world connected to indigenous astronomy. The UNESCO Astronomy & World Heritage Initiative has the goal of adding properties connected to astronomy to the World Heritage List. I have been part of the team of experts since 2005.

The plan was to have new astronomy sites added to the World Heritage list during the International Year of Astronomy, but though new sites have been nominated, they have yet to be inscripted. One property already on the World Heritage List that is connected to astronomy is the Struve Geodetic Arc, which spans Belarus, Estonia, Finland, Latvia, Lithuania, Moldova, Norway, the Russian Federation, Sweden, and Ukraine. This was the path of an experiment conducted in the 1800s that helped determine the size and shape of the Earth.

The Kazan Astronomy and World Heritage meeting furthered the goal of including more sites related to astronomy by presenting new sites that may be nominated in the future, setting out new guidelines for the initiative, and creating a new book focused on properties around the world connected to astronomy.

During the Kazan meeting, I had the opportunity to meet Russian Cosmonaut Georgy Grechko (pictured with me above). Grechko has spent 96 hours in space! In his talk "Space Horizons," Grechko praised the Hubble Space Telescope as an example of the efficiency of

unmanned spacecraft versus manned space missions in terms of scientific production. He was careful to state that biological experiments in space must be conducted by humans, but that otherwise unmanned missions are better. Having just completed a film about the impact of the Hubble Space Telescope on the lives of minority astronomers in the USA, I was excited to hear the importance he placed on HST.

I think that Cosmonaut Grechko is absolutely correct about unmanned scientific missions being much more efficient in terms of both money and scientific output. Though I feel that we must advance manned missions, this should not be done at the sacrifice of projects such as HST and the new James Webb Space Telescope. America needs to continue to fund both.

Space exploration has always represented our future. It is hard to justify continued scientific and manned space missions during the current financial recession. However, in my opinion, these projects must not be abandoned altogether, because the benefits to our society in terms of scientific and biomedical advances far outweigh our initial financial investment.

While in Kazan, I had the opportunity to speak with many astronomers about the status of astronomy in the new Russian Federation. The astronomers revealed that many observatories are closed or are struggling to find funding to remain open. The Russian Federation has been very strategic in what they have decided to support in terms of astronomy research, and as a result has limited the areas of astronomy that are receiving government support. One astronomer spoke more generally of astronomers in Russia being far more practical and applied in their approach to astronomy than American astronomers, for instance, who were much more abstract and exploratory. I have to wonder if this speaks to the political culture of Soviet Russia and how that culture has impacted even the way that astronomy is done in Russia

The International Year of Astronomy is being promoted in Russia, but as in most other places funding for activities is scarce. However, Kazan hosted two conferences and a workshop for students as IYA2009 events during the week that I was visiting. Very positive for IYA2009!

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HAD member Steve McCluskey (left) receiving the first *Distinguished Service in American Southwest Archaeoastronomy* award at the Conference on Archaeoastronomy of the American Southwest in 2009. The presenter is Todd Bostwick.

#### Call for Nominations for the 2011

# HAD BOOK PRIZE FOR HISTORICAL ASTRONOMY

In 2011 the Historical Astronomy Division of the American Astronomical Society will begin awarding the HAD Book Prize biennially to the author(s) of the book judged to best advance the field of the history of astronomy or to bring history of astronomy to light. "History of astronomy" is taken in its broadest sense, that is, to include all historical studies of the astronomical research, observations, practices, and beliefs of all cultures, past and present.

Any member or affiliate member of HAD may nominate a book for the Prize.

Deadline for nominations for the current prize cycle will be March 1, 2010. Books with copyright dates 2006–2009 will be eligible.

Please send the title, author, and publisher and any supporting materials to the Secretary of the Prize Committee, <u>Joseph S. Tenn</u>.

For further details about the Prize, please visit <a href="http://www.aas.org/had/bookprize/">http://www.aas.org/had/bookprize/</a>.

Sara J. Schechner Chair, HAD Prize Committee schechn@fas.harvard.edu



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

On 1 June I retired after 39 years of teaching physics and astronomy at Sonoma State University. Now I have more time to devote to HAD and my other history of astronomy activities.

The HAD Committee has established rules for the new HAD Book Prize, to be awarded in January of odd-numbered years. (HAD's highest honor, the LeRoy E. Doggett Prize for Historical Astronomy, will continue to be awarded in even-numbered years.) The call for papers is on the previous page. Detailed rules appear on the HAD website.

Please note the information on p. 10 regarding making reservations for the HAD Minibanquet on 4 January and the field trip to the old U.S. Naval Observatory site on 5 January.

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# For IYA: The Universe Delivered to Your Doorstep

Virginia Trimble, University of CA, Irvine

Well, at least visits from experts about the universe and its contents.

The AAS Committee on Status of Minorities in Astronomy (CSMA), Las Cumbres Observatory (LCO), the relativity group at University of Texas, Brownsville (UTB), and a few other entities are cooperating in an attempt to share the excitement of the cosmos with four-year colleges and other interested organizations. The idea is that the college asks for a speaker, and we attempt to find someone who will be a good fit and cover most of the travel expenses. Expertise requested could be black holes or life in the universe or how Einstein developed relativity or cosmology or whatever the college seeks to excite its students.

The person will typically come for a day or so to speak with one or more classes, groups of students,

faculty, and so forth. There is no requirement to organize a public talk, though it is not forbidden—we are not trying to compete with the Shapley program!

This message is going specifically to HAD members because in 2005, when a similar team ran a World Year of Physics speakers bureau, it was the members of the APS Forum on History of Physics who produced the largest yield of both talk requests and volunteer speakers. For more information, please go to our UTB web site <a href="http://arcc.phys.utb.edu/web/LasCumbres/REQUESTS/howto.html">http://arcc.phys.utb.edu/web/LasCumbres/REQUESTS/howto.html</a>.

If perchance you are willing to be a speaker, please get in touch with the SCMA and LCO contacts, Keivan Stassun and Virginia Trimble.

vtrimble@astro.umd.edu

## **Pollock Award Proposals Sought**

Janie Schwab, Dudley Observatory

The Dudley Observatory is accepting proposals for the 2010 Herbert C. Pollock Award. The purpose of the award is to provide encouragement and support for an innovative project in the history of astronomy or astrophysics, to be undertaken by a faculty member, research associate, or postdoctoral researcher associated with a college, university, nonprofit research institution or observatory located in North America. Applications from persons meeting the other requirements, who are not currently affiliated with any institution, will also be considered.

Special consideration will be given to proposals that involve the use of the Dudley Observatory Archives, the Dudley Collection of early astronomical works housed at Union College, or the Benjamin A. Gould, Jr. library held by Dudley Observatory.

The Award consists of a maximum of \$5,000 to be distributed in the year of the Award. A recipient of the Pollock Award may not reapply for a new award for three years. Application deadline is 15 Nov 2009.

More information and a list of previous recipients may be found at <a href="http://www.dudleyobservatory.org/">http://www.dudleyobservatory.org/</a> Research grants/Pollock award.htm.

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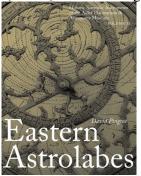
#### **Book Announcement**

Jodi Lacy, Adler Planetarium

The Adler Planetarium's Webster Institute for the History of Astronomy is proud to announce the publication of *Eastern Astrolabes* by David Pingree.

The Adler Planetarium houses one of the world's great collections of astrolabes. In this volume, David

Pingree documents the Eastern astrolabes from the Adler's collection. Instruments from the twelfth through nineteenth centuries are described in detail, with photographs illustrating each astrolabe component. An introduction gives background information, while appendices provide technical information. This volume also includes twenty-seven other Islamic instruments, including quadrants, qibla indicators, sundials, levels, and celestial globes.



Eastern Astrolabes complements Western Astrolabes (1998), the first volume in the series Historic Scientific Instruments of the Adler Planetarium & Astronomy Museum. Further information about the book may be found at <a href="http://shop.adlerplanetarium.org/catalog/display.php?p">http://shop.adlerplanetarium.org/catalog/display.php?p</a> roduct id=1015.

ilacy@adlerplanetarium.org

# **Cultural Astronomy Summer School**

Thomas Hockey, Univ. of Northern Iowa [CASS organizer]

HAD sponsored the first-ever Cultural Astronomy Summer School (CASS) as a splinter session prior to the 214th meeting of the AAS in Pasadena in June 2009. CASS was held with the support and encouragement of the International Year of Astronomy USA Cultural Astronomy and Storytelling Group.

CASS explored the place of astronomy in human culture, including the history of astronomy, ethnoastronomy and archaeoastronomy, and topics such as time finding, calendars, and navigation by the stars. The course enriched the current training of professional astronomers by giving them tools and themes to use in undergraduate education or public outreach programs.

The faculty included Stephen McCluskey, Professor Emeritus at West Virginia University, who has been investigating the astronomies of various cultures since the publication of his "Astronomy of the Hopi Indians" in 1977. He has served the AAS as founding chair of its Working Group on the Preservation of Astronomical Heritage and is a founding member and past president of ISAAC (the International Society for Archaeoastronomy and Astronomy in Culture).

CASS faculty member Joann Eisberg earned her Ph.D. in the History of Astronomy at Harvard University, and she is now Associate Professor of Astronomy at Chaffey College. She is most interested in the history of modern astronomy, issues of science teaching, women in science, and the role of science in modern society.

An active agent of public astronomy, CASS faculty member E. C. Krupp is a professional astronomer and Director of Griffith Observatory in Los Angeles. He is the author and editor of five books on ancient, prehistoric, and traditional astronomy, has written four children's books on the sky, and has published hundreds of articles and dozens of research papers on these topics. Searching for astronomical connotations of culture, he has visited over 1,800 ancient and prehistoric sites throughout the world.

Who were the sixteen CASS students? Preference was given to graduate students in astronomy. For instance, Tatjana Vavilkin is in her final year of graduate studies at Stony Brook University, and Lia Corrales and Duane Lee are Ph.D. students at Columbia University.



Other CASS students were early-career astronomy professionals. Emily Rice (UCLA) begins a postdoctoral appointment at the American Museum of Natural History this fall. She is involved in science education and outreach, with a particular interest in planetarium programming. Erika Grundstrom (Ph.D., Georgia State University) has a postdoctoral appointment at Vanderbilt University. Olga Kuhn is an instrument-support astronomer at the Large Binocular Telescope. Prior to this, she worked for five years at the United Kingdom Infrared Telescope.

Still others were in-service astronomy teachers. Nancy Alima Ali has a Master of Education degree from Lesley University, in which she specialized in astronomy and culture. She teaches archaeoastronomy at Windward Community College in Hawaii. Margarete Allen teaches astronomy and physics at Los Angeles Pierce College. Christine Johnson is a producer for Known Universe, which airs on the National Geographic Channel.

CASS concluded with a bus trip (pictured above) to the Mount Wilson Observatory (MWO). Our two-hour tour was arranged by Harold A. McAlister (Mount Wilson Institute) and Gale D. Gant (Mount Wilson Observatory Association). It was conducted by Don Nicholson, son of Seth Nicholson (MWO astronomer 1915-1957) and expert on the history of the Observatory. Don spent much of his youth on the Mountain. Along the way we were treated to an inside view of the working 150-Foot Solar Tower.

After CASS, one student wrote:

Thank you for hosting this summer school! It was the first series of talks on the history of astronomy and cultural astronomy that I attended . . . it was a good note on which to start the summer. [My] favorite part of CASS was meeting with others who have an interest in cultural astronomy. I learned a lot from the lectures as well as the informal talks at lunch and on the way to and from Mt. Wilson. The three speakers had quite diverse approaches and gave me a lot to think about and look into afterwards.

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**Book Review** 

Thomas Hockey, Univ. of Northern Iowa

Calendars and Years: Astronomy and Time in the Ancient Near East, edited by John M. Steele (Oxbow Books, Oxford, 2007).

If scholarship is a Venn Diagram, chronology occupies the intersection of astronomy and archaeology. The result is that archaeologists often do not know from where calendrically determined dates come, and astronomers inevitably do not know how to date a calendar.

To bridge the gap, a special session was held at the seventh History of Astronomy Workshop (Notre Dame VII) on 8 July 2005. *Calendars and Years* is based upon six papers presented to us that day. A seventh, Uwe Glessmer's on the Library of Qumran, does not appear as a chapter in the book; instead, Alexander Jones's (University of Toronto) previously unread "On Greek Stellar and Zodiacal Date-reckoning" is included. The editor is John M. Steele, who is now a member of the Brown University faculty.

The nucleus of the book is a set of four papers/chapters, each by a different scholar (including the editor), which describe calendars in ancient Mesopotamia. It was a remarkable state of affairs! For a millennium, two luni-solar calendars operated independently of each other, side-by-side: a cultic lunar calendar and a thirty-days-per-month, twelve-month, civil calendar used for administrative and business purposes.

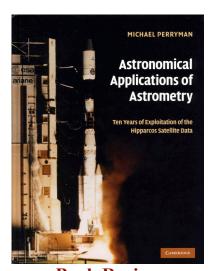
The book does not provide biographical details for its authors. Lis Brack-Bernsen is on the faculty of Regensburg University. Wayne Horowitz is a Lecturer in the Department of Assyriology at Hebrew University. John P. Britton holds a PhD. from Yale University and is author of *Models and Precision: The Quality of Ptolemy's Observations & Parameters* (1992).

There also are two papers/chapters on Egyptology. The first is by Sarah Symons, who teaches archaeo-astronomy at Leicester University. In it, we learn to question everything we have heard about decans. Were they indeed invented for star-rise timekeeping? Were they instead used to construct a calendar? If Symons is iconoclastic, Brown professor Leo Depuydt exhaustively defends the status quo in his paper/ chapter: "The Soundness of Egyptian and West Asian Chronology in 1500 – 500 BC and the Consistency of the Egyptian 365-day Wandering Year."

Each of the contributions in *Calendars and Years* stands alone. Depuydt's still reads very much like an oral presentation, including some redundancies. There is no attempt to link the seven authors' work via a foreword or afterword. No index or glossary is included.

To better comprehend Steele's book, it helped me to read Otto Neugebauer's *The Exact Sciences in Antiquity*, 2nd ed. (New York: Dover, 1969) and hold it open to the timeline with one hand while turning the pages of Steele with the other. N.M. Swerdlow's *Ancient Astronomy and Celestial Divination* (Cambridge, Mass.: MIT Press, 1999) is another good prerequisite.

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**Book Review**André Heck, Strasbourg Observatory

Astronomical Applications of Astrometry: Ten Years of Exploitation of the Hipparcos Satellite Data, by Michael Perryman (Cambridge Univ. Press, Cambridge, UK, 2009).

While a post-doc based at Liège Institute of Astrophysics, I spent the month of May 1976 at Strasbourg Observatory lecturing on distance determination methods. The local director, a gentleman molded in the old-style, somewhat authoritative, managerial approach so typical of the elder French generation of the time, one day put on my desk a set of notes and requested my comments. Puzzled by what seemed to be a poisoned honor, I started flipping through the pages and discovered a project for an astrometric satellite. The gentleman was Pierre Lacroute (1906-1993), whose directorship was the longest in the history of Strasbourg Observatory (30 years), and who had considered carrying out astrometry from space as far back as 1965. With Pierre Bacchus (1923-2007), at Strasbourg Observatory from the end of WWII until the sixties, he had also tackled the challenge of data reduction.

That astrometric space project finally became the *Hipparcos* satellite launched by the European Space Agency on 8 August 1989, with a broadened scope and an association with the *Tycho* experiment, both involving numerous scientific teams. The operational life of the satellite ended on 15 August 1993. Lacroute had already passed away and could not see the enormous catalogue (17 volumes!) resulting from his brainchild, nor the very numerous investigations carried out from the data as demonstrated, for instance, by the impressive scientific colloquium organized in

Venice by ESA in 1997. *Hipparcos* had enabled the measurement of positions, distances and proper motions, pinpointing more than 100,000 stars, typically 200 times more accurately than ever before.

Perryman was Project Scientist for the *Hipparcos* mission from 1981 to 1997. He was therefore ideally positioned to compile (from some 5000 papers) this masterpiece of about 700 pages. The book is carefully presented and structured, very well documented with plenty of references, and complete with indices and appendices covering numerical quantities, acronyms and a welcome author gallery. I also appreciated the reproduction of many illustrations and tables, as well as the usage of inserts on specific themes.

Here is a volume of pure contemporary history of astronomy that no one should miss.

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#### **DVD Review**

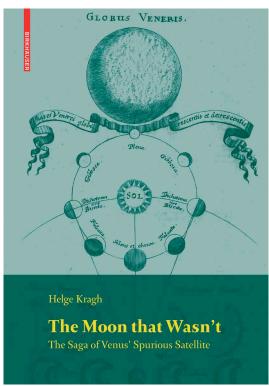
André Heck, Strasbourg Observatory

Tours du Monde. Tours du Ciel. Une exploration de l'univers à travers les âges, film by Robert Pansard-Besson (Arkab Productions & EDP Sciences, Paris); set of 4 DVDs + booklet of 274 pp., 2009).

In 1987-1990, Robert Pansard-Besson produced top-quality scientific television programs telling our progressive understanding of the universe from ancient times to the 1980s. Numerous sites around the world were filmed; astronomers and physicists were interviewed, as well as engineers, ethnologists, egyptologists, archaeologists, historians of science, etc.; highlighting commentaries were added throughout the films, especially via dialogues between astrophysicist Pierre Léna and philosopher Michel Serres – all this with an original score by Georges Delerue. This recently issued set of four DVDs is a "remasterized" version of this prize-winning series, presented in ten segments of 52 min. each. The package comes with a booklet including the main dialogues and an extensive glossary (about forty pages).

Because of their historical contents, the movies are not dated and are warmly recommended to anyone wishing to put in perspective today's astronomical investigations. The interviews are in original languages, many of them in English, subtitled in French. An option for hearing-impaired viewers enables the display of French subtitles for the entire series.

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**Book Review** 

Thomas Hockey, Univ. of Northern Iowa

The Moon that Wasn't: The Saga of Venus' Spurious Satellite, by Helge Kragh (Birkhäuser, Basel, 2008).

I think that Helge Kragh is probably the best historian of cosmology working today. Thus, this little book, on a much smaller subject (in every sense of the word), is a surprise. That is true as well for the lighter writing style that the author exhibits in his most recent offering, making it an entertaining read.

Heretofore, the story of an erstwhile Cytherian satellite has appeared only as a chapter of Richard Baum's (1973) *The Planets: Some Myths and Realities* (republished as *The Haunted Observatory: Curiosities from the Astronomer's Closet* by Prometheus Books in 2007).

In this latest work, we discover that, while those who thought that they observed such a new body could be accused of being selective in their data, so too could those who sought to explain away these observations. For we learn that many competent observers "saw" the missing moon, even though (unlike, say, the canals of Mars) there was no pressing cosmogonical, physicotheological, or—even—numerological theory encouraging them to do so. We also are treated to a philosophy-of-science inquiry in the ultimate chapter,

where the author asks the intriguing question: "If an observation is not confirmed, what does it take to disconfirm it?"

The appearance of this book reminds me that there is no book-length history of Venus observing. Mars has been amply treated. Even in the case of Mercury, there still exists E. M. Antoniadi's (1974) *The Planet Mercury* (thanks to Patrick Moore's translation), which is largely historical. Yet for the planet closest to the Earth, Kragh's book is the closest thing we have to such a history, neglecting for the moment that it is a monograph about a nonexistent phenomenon!

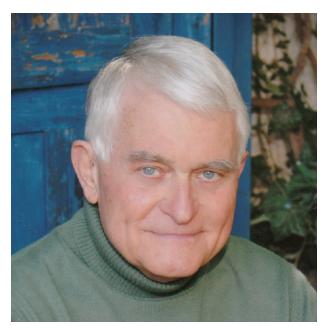
Kragh chooses to include little biographical information about the book's *dramatis personae* within its chapters. Rather, he attaches an appendix of thumbnail biographies, much as Olaf Pedersen did in his trusty (1974) *Early Physics and Astronomy: A Historical Introduction*. Here, though, the technique is not as effective: Because the subject matter is a chimera, the reader needs a strong cast of characters to be drawn into the "plot." Instead, each largely remains just one more figure who thought he saw something near Venus—until placed in context after the last chapter.

The volume itself is attractive. My only quibble is that the figure captions are in the same font, and of the same size, as the text, and indented in the same way. Therefore, it is easy, reading from paragraph to paragraph, to stumble into a caption unexpectedly. The cover is graced by rare artwork featuring Venus's "satellite"; that the designer placed the book's title over the key figure element, while leaving the less relevant parts of the diagram type-free, must have irked the author.

The Moon that Wasn't is a valuable installment of Birkhäuser's Science Networks – Historical Studies series, which Kragh himself co-edits. We read on the title page that it was written "with the assistance of Kurt Møller Pedersen." I hope that such nomenclature does not become common, inasmuch as this makes it difficult to know how to cite a book: The Co-author that Wasn't?

Other relevant sources to read along with *The Moon that Wasn't:* Baum, Richard & Sheehan, William. *In Search of Planet Vulcan: The Ghost in Newton's Clockwork Universe.* New York: Plenum, 1997 and Sheehan, William. *Planets and Perception: Telescopic Views and Interpretations, 1609-1909.* Tucson: University of Arizona Press, 1988.

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John A. Eddy, 1931-2009

Joseph S. Tenn, Sonoma State University

On 10 June 2009 HAD lost one of its founders. John A. "Jack" Eddy was known for his work on the Sun, solar-terrestrial relations, and North American archaeoastronomy.

His 1976 publication on the Maunder Minimum, which he named, made him famous. He pointed out that sunspots were almost nonexistent between 1645 and 1715, and that this corresponded with the "Little Ice Age," an unusually cold period in Europe. He insisted that the Sun is a more variable star than generally thought, and that it has direct effects on the terrestrial climate.

Eddy also worked extensively on Native American medicine wheels, propounding the controversial thesis that they were used as calendars and observatories. His views eventually came to be accepted.

More information may readily be found online in sources such as the <u>obituary</u> published in the *Telegraph* on 21 June 2009 or in <u>Wikipedia</u>.

Of direct interest to HAD members is that Eddy, along with Owen Gingerich and Ken Brecher, founded the Division in 1980.

Owen Gingerich recalls:

In the fall of 1978 Jack Eddy was in residence here at the Center for Astrophysics, and across the Charles, at Boston University, Ken Brecher was professor of astronomy. Archaeoastronomy was in its heyday, with a lot of enthusiasm in the astronomical community even by those of us who weren't active investigators. It was fun to have Jack around, because he had actually measured some of the medicine wheels in the

western US. Our trio got together from time to time for wide-ranging conversations, and one topic was how to tap the interest in history and archaeoastronomy within the AAS. I had recently been a councillor of the Society, so I had some idea about the procedures for setting up a division. The three of us agreed that it should not be the "Division for the History of Astronomy," but the "Historical Astronomy Division" in order to encompass not only the history of astronomy but also archaeoastronomy and the application of historical records to modern astrophysical problems. This three-fold goal has been preserved in HAD's statement of purpose in the bylaws.

Details of the process have been well recorded by Katherine Bracher in her history of the Division (<a href="http://www.aas.org/had/hadhist.html">http://www.aas.org/had/hadhist.html</a>). I served as chairman pro tem, but Jack Eddy was the first elected chairman when the division was finally official, in 1980. With his wry sense of humor, he produced the plaque that has been handed to every division chair who followed, reading "Ich bin HAD." Thus Jack's sense of fun lives on.



This quilt, made by HAD past chair Sara Schechner, is a copy of a well-known photograph of the 26-inch Alvan Clark telescope as first set up at the original USNO site in Foggy Bottom, ca. 1873. Simon Newcomb is at the eyepiece. Like Newcomb, who wrote extensively on economics, mathematics, and numerous other fields besides astronomy, Sara has multiple talents.

# **Meeting in Washington**

continued from p. 1

This session, marking the sesquicentennial of the beginnings of astronomical spectroscopy with the work of Robert Bunsen and Gustav Kirchhoff in 1859-60, will be held Sunday, 3 January 2009, from 2:00 to 5:00 PM.

Keynote speaker will be John Hearnshaw, author of two books on the history of spectroscopy, who is coming from New Zealand to speak on "Auguste Comte's Blunder: An Account of the First Century of Stellar Spectroscopy and How It Took One Hundred Years to Prove that Comte Was Wrong!" He will be followed by Matthew Stanley, giving a more philosophical perspective with "Spectroscopy — So What?"

Barbara Becker will present "From Dilettante to Serious Amateur: William Huggins's Move into the Inner Circle," and Barbara Welther will speak on "Discoveries, Achievements, and Personalities of the Women Who Evolved the Harvard Classification of Stellar Spectra: Williamina Fleming, Antonia Maury, and Annie Jump Cannon."

Richard Jarrell will describe "The 1910 Solar Conference, Cooperation in Stellar Spectroscopy and the Emergence of the Large Reflector," while David DeVorkin will present "Extraordinary Claims Require Extraordinary Evidence: C. H. Payne, H. N. Russell and Standards of Evidence in Early Quantitative Stellar Spectroscopy."

The session will conclude with Vera Rubin presenting "Charlotte Moore Sitterly: A Life of Spectroscopy."

Read their abstracts and make your plans.

The **Doggett Prize Lecture** will be presented by Michael J. Crowe, the seventh historian of astronomy to receive HAD's highest honor, the LeRoy E. Doggett Prize for Historical Astronomy. Crowe will present "Seventeen Key Developments in the History of the Extraterrestrial Life Debate" at 4:30 p.m. on Monday, 4 January.

There will be three sessions of contributed oral papers on Monday and Tuesday and poster presentations Monday.

Other highlights of the meeting for HAD members will be the third **HAD Minibanquet** on Monday evening and a **tour of the site of the original U.S. Naval Observatory** on Tuesday afternoon. Reservations for both are necessary. See adjacent column.

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#### **Reserve Now for HAD Minibanquet**

The third annual HAD Minibanquet—much cheaper and more informal than the AAS Banquet—will be held Monday, 4 January 2010, after Michael Crowe's Doggett Prize lecture.

This year's banquet will be at the Cactus Cantina, a Mexican restaurant a short bus or taxi ride from the meeting site. Dinner will cost only \$21 for the Parrilla Menu. Alcoholic beverages will be extra.

To make your reservation please send your name and number of guests to Joe Tenn at joe.tenn@sonoma.edu no later than 30 December 2009. Let me know if there are any vegetarians in your party.

# **Reserve Now for USNO Field Trip**

HAD member Geoff Chester, Public Affairs Officer of the U.S. Naval Observatory, has arranged a field trip for HAD members and their guests to the site of the original Naval Observatory in the Foggy Bottom district of Washington, D.C. (not to be confused with the current site).

The tour will be at 2:00 p.m. Tuesday, 5 January 2010.

Since the site is still used by the Department of Defense, although for different purposes, there are some security concerns. This means that if you wish to attend you must send your full name and date of birth to Joe Tenn at joe.tenn@sonoma.edu no later than 30 December 2009. U.S. citizenship is not required. Be sure to bring photo ID.

# Why AAS Meetings Cost So Much

Kevin Marvel, Executive Officer, AAS

One of the most frustrating things for me in my role as Executive Officer is dealing on a regular basis with the wider world beyond research astronomy. I plow through these matters, however, because I know that by doing so I am ultimately helping astronomy move forward.

One of the areas that requires the most attention is the organization of scientific meetings. Over time, our reserves have been depleted because of the poor financial results for meetings.

Our team has been able to determine a true "full-cost" per meeting attendee. This cost, by Council vote, also includes the subsidizing of junior and emeritus members. The resultant rate is

the on-time, full-member, full-meeting rate. This represents our true cost for having a person attend our full meeting and includes the provision of A/V, coffee breaks, meeting materials, the physical space, security and other expenses.

Unfortunately, the result of this prudent financial planning is that our registration rates have gone up. I fully recognize that this has placed a larger burden on our meeting attendees, even members of HAD who want to come just for the two days of the HAD sessions. Because HAD is an important part of our Society and we want to ensure HAD continues to meet with us regularly—especially because of the Doggett prize lecture and the interesting special sessions the Divsion organizes—we have established a special, subsidized rate for two-day attendance only, which includes the Sunday and Monday activities.

Please be assured that the Council and I will do everything in our power to keep our costs down, to maintain the best possible scientific meetings and to continue to encourage all of our Divisions to meet with us. I look forward to attending some of the HAD sessions in Washington, DC and am happy to let you know that DC is set to be the largest astronomy meeting ever held, with 2075 abstracts submitted on time. I hope all of you will be there to help us make history!

kevin.marvel@aas.org

# **Crowe Awarded Doggett Prize**

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in Science from the University of Notre Dame in 1958. He earned a Ph.D. in the History of Science with minors in Physics and Intellectual History from the University of Wisconsin in 1965.

Professor Crowe's first book, A History of Vector Analysis (University of Notre Dame Press, 1967, revised Dover editions, 1985, 1994), was followed by The Extraterrestrial Life Debate, 1750-1900: The Idea of a Plurality of Worlds from Kant to Lowell (Cambridge University Press, 1986, revised 1988, and Dover, 1999). This magisterial and ambitious work opened up a new and rich field for scholarship and made the history of beliefs in alien life a legitimate field for discussion. It is an indispensable resource that is unlikely to be surpassed for a long time to come. A companion source book, The Extraterrestrial Life Debate: Antiquity to 1915, was published in 2008

(University of Notre Dame Press).

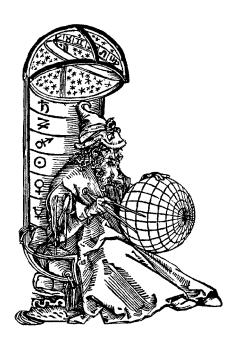
Crowe's other main research interest has been the work of William and John Herschel. Here he has offered new interpretations of their careers. For example, he has made a very strong case for the importance of William Herschel's belief in extraterrestrial life as a guiding principle in his construction and use of large reflecting telescopes. *The Calendar of the Correspondence of Sir John Herschel* (Cambridge University Press, 1998), edited by Michael Crowe, is an unparalleled resource for Herschel scholarship and many topics in 19th century science.

Professor Crowe has done much to advance the discipline of the history of astronomy through his teaching. He was the founding chair of Notre Dame's Graduate Program in History and Philosophy of Science and has also served as chair of the University's Program of Liberal Studies. He has taught for close to 50 years at Notre Dame. His Theories of the World from Antiquity to the Copernican Revolution (Dover, 1990, rev. 2001), Modern Theories of the Universe from Herschel to Hubble (Dover, 1994), and Mechanics: From Aristotle to Einstein (Green Lion, 2007) started out as course readers. They have become foundational texts widely used in college courses and independently by newcomers to the history of astronomy.

Students and colleagues describe Michael Crowe as compassionate, inspiring, and generous in sharing results. He has been called a cultivator of scholars as well as scholarship.

His welcoming nature is best exemplified by his central role in establishing in 1993 the Biennial Notre Dame Workshops for the History of Astronomy. These workshops have become the premier gathering of historians of astronomy and done much to establish a sense of community among them. Professor Crowe created a space in which scholars of all ages and backgrounds could rub shoulders and share in convivial discussions of history-of-astronomy topics without regard to seniority or hierarchy. Indeed, many historians in the field have attributed their successful launch to the welcome, encouragement, and mutual support that they first received at one of these forums. It has been said that if Mike Crowe had done nothing else for the profession, his organization and hosting of the Notre Dame Workshops is a contribution to the field of history of astronomy that is worthy of recognition by the LeRoy E. Doggett Prize.

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Historical Astronomy Division of the American Astronomical Society

HAD News #75, October 2009, 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 at the HAD website at <a href="http://www.aas.org/had/">http://www.aas.org/had/</a>

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