### Newsletter 105 + June 2001

# NEWSLETTER

The American Astronomical Society 2000 Florida Avenue, NW, Suite 400 Washington, DC 20009-1231 202-328-2010 aas@aas.org



Wallace L. W. Sargent, Ira S. Bowen Professor of Astronomy at Caltech is the 2001 Russell Lecturer. Photo by Robert Paz, California Institute of Technology

# AAS NEWS 2001 Prizes: Wallace Sargent Russell Lecturer

### The American

Astronomical Society has presented its 2001 Henry Norris Russell Lectureship to Wallace L. W. Sargent of the California Institute for Technology. The Lectureship is given annually on the basis of a lifetime of eminence in astronomical research. In making their selection, the prize committee cited Sargent for "his

contributions to astronomical spectroscopy. They noted further that "(h)is work in stellar spectroscopy of A-type stars led to the discovery of the He3 isotope in the star 3 Centauri. He involved many of his students in his work in extragalactic spectroscopy, which produced the first evidence for a black hole in the galaxy M87 and culminated with his studies of quasar absorption lines. His demonstration that the Lyman-alpha forest absorption arises from intergalactic primordial gas clouds provided a fundamental new probe of primeval gas in the early universe. Throughout his career he has been an intellectual leader and educator."

Sargent was born in Lincolnshire, England and received his education entirely in the United Kingdom. In 1959 he earned a PhD in astrophysics at Manchester University and became Research Fellow in Astronomy at Caltech for the next three years. He became Senior Research Fellow at the Royal Greenwich Observatory before returning to the US in 1964 where he has been affiliated ever since. Starting as assistant professor of physics at the University of California San Diego, he soon moved to the

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Catherine (Caty) A. Pilachowski, AAS President-Elect, is an astronomer at the National Optical Astronomy Observatory. She earned her PhD in 1975 at the University of Hawai'i; her research interests include stellar evolution, nucleosynthesis, stellar compositions and globular clusters. She has a long history of service to the AAS and to the community, dating back to 1980, including membership on many AAS and other Committees, Chair of the AAS Publications Board, Shapley Lecturer, and member of the AAS Council.

# PRESIDENT'S COLUMN

Anneila Sargent, Caltech, AAS President

### **Bush's First Budget: Grim News for Science**

President Bush submitted his budget to Congress on 9 April, and the news is grim. Seven of the ten largest R&D funding agencies are looking at a real decline in FY 2002. It seems like the only agencies with increases will be the National Institutes of Health, the Department of Defense and the Department of Transportation (due to guaranteed funding from transportation trust funds, not as a result of Presidential favor). To make matters worse, this budget is accompanied by a Presidential mandate for no new program or construction starts across the government as a whole. The mandate seriously threatens several projects given high priority in the recent McKee-Taylor report, and also a hold-over project from the last decadal report, the Atacama Large Millimeter Array (ALMA).

NSF is particularly hard hit — a major disappointment after the FY2001 13% budget increase. In the President's budget, the total funding for NSF would barely increase and the Foundation's overall R&D budget would actually decline by 1.7% (before inflation!) to \$3.2 billion. Although some new initiatives would receive increases (notably NSF's science and mathematics education activities), the core of NSF, its Research and Related Activities accounts, would be cut in most directorates, including astronomy.

The impact on Astronomy is not immediately obvious because ALMA development funding is shifted from the Major Research Equipment account to the Astronomy Division's Facilities Budget. As a result, astronomy's budget appears to have increased but in fact the total funding available for astronomy activities within the Foundation is effectively lowered.

NASA's Office of Space Science fares better in the President's budget with an overall increase of 6.2% to \$2.8 billion. The success of Space Science compared to the other NASA enterprises is striking. It appears to be due to the development of a focused program that has been well-defended to the Budget examiners at the Office of Management and Budget.

What can we do?

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# **LETTERS TO THE EDITOR**

### The Status of Women in Astronomy

Dear Editor:

In his comments concerning the retention of an Astronomy award specifically for women (Letter to the Editor, AAS *Newsletter* 104, March 2001, pg. 2), Professor Merrifield remarks that continued "ghetto-ization" of women in astronomy cannot be healthy, either for the women in the field or for the subject as a whole, and suggests that the time has come to address the matter. He is not alone in the fond belief that a decade of sabre-rattling must by now have brought about the desired effect.

Sadly, that is not so. It would indeed be more adult to abolish as outmoded the need for positive discrimination within academic astronomy, or within any of the sciences. But there are many women still active and productive in astronomy who have been permanently denied respectable academic careers on the grounds that their husbands supported them financially. The removal of such barriers nowadays encourages younger women to pursue scientific careers that fully reflect their ability and interests, and Equal Opportunities legislation offers some protection for those qualified to seek promotion. However, little has been done by most countries, including the UK from which Professor Merrifield writes, to redeem past injuries. To encourage one generation of qualified scientists whilst quietly dismissing another is an act of hypocrisy that defeats its objectives, since those senior women unwittingly serve as extremely discouraging role models. Civilized societies which knowingly turn a blind eye to the ongoing financial, social and cultural damage which their policies have wrought within their astronomical communities deserve the stigma of, and the need for, "ghetto-ization."

I believe that the correct time to remove positive discriminatory measures can best be judged by the victims as a group, rather than by the bystanders.

Elizabeth Griffin remg@astro.ox.ac.uk

### **Concerning Virtual Observatories**

Dear Editor,

Dr. Heck makes a good-humored criticism, of the use of the term "Virtual Observatory" (Letter to the Editor, AAS *Newsletter* 104, March 2001, pg. 2), to describe certain modern digital research facilities. As possibly the first to use the term (http://herbie.ucolick.org/techdocs/vo) for the title of an astronomical project in 1997, I would like to take this opportunity to comment on Dr. Heck's letter.

In 1997 I was outlining a proposal to collect, sort, catalogue and digitize the world's heritage collection of photographic spectra - observations of incomparable value for their time span, but virtually unuseable by most modern research because of their inherently non-digital form. The plan as then described was to digitize past observations upon request, and it was that aspect of acquiring observations without entailing telescope time which prompted the (correct) description of the project as a "virtual" observatory. Although details of the project have since been modified, the name on our Web page has stuck, and has now been copied widely. Imitation, I'm told, is the sincerest form of flattery.

But Dr. Heck's discussion of "virtuality" refers to observations, not to observatories. Virtuality, in the context in which he uses it, reflects the fact that the recorded radiation which constitutes a new observation is actually out of date by the light-distance of the object in question, a matter over which astronomers have no choice. A virtual observatory, on the other hand, can be an operation in which the acquisition of fresh data does not actually occur, where observing is not actually carried out, or where instruments for observing do not actually exist.

There are numerous observatories around the world whose existence long ceased to depend on the acquisition of fresh observations with their own telescopes. Strasbourg Observatory is one such, though its staff have developed a fine expertise in collating and digitizing catalogues of past data. But, as Shakespeare asked, "What's in a name?" The astronomical community departed over a century ago from the dictionary definition of an observatory as "a building [Note: *not* a collection of buildings] designed and equipped for scientific observation of the stars or weather." The Royal Greenwich Observatory, in its final non-virtual incarnation, left Greenwich in 1948, was divorced from Royal patronage in 1965, and ceased to operate local telescopes when it moved to Cambridge in 1990 to become the archetypal administrative and digital research facility for overseas observing.

To avoid conflict through the non-uniqueness of the name "Virtual Observatory," we have modified ours to "Spectroscopic Virtual Observatory." Our plan to create a research database for the community by digitizing astronomy's heritage of photographic spectra is unique in astronomy. But it is not unique in academe: geographers, geologists, architects, historians, anthropologists, climatologists and oceanographers alike are already digitizing their inherited collections of maps, architectural drawings, hand-written records and historic photographs. Other branches of astronomy are proposing to digitize images of the sky recorded up to (and even exceeding) 100 years ago.

An observation by itself, in a vacuum, has limited potential. Compare it with another observation of the same object at a different time, and immediately it imparts scientific information. An essential element of scientific observing, therefore, is the facility to make comparisons, to chart changes or to measure constancy. Whether we are scanning POSS-2 plates, deriving orbits of potentially hazardous near-earth objects, monitoring photometric variations with periods of 20 years or juxtaposing eclipse events spanning decades, we are fulfilling an essential purpose of an observatory, which is to offer the opportunity for scientific comparisons. It is in recognition of that basic element of scientific research that observatories have, through the ages, maintained archives of their observations, and now is our golden opportunity to realize the full potential of that heritage by transferring the information to a more readily accessible digital medium, converting the virtually inaccessible into the accessible virtually.

It is true that the observations which are to be made available through our project are not new in the sense of freshly collected. But neither are what Dr. Heck calls "fresh" observations very new when released from priority protection; most are many months, if not years, old. It matters not whether the hiatus has been caused by waiting for a student to complete a thesis and release the data, or for a digitizing crew to come up with the equipment and funding and transfer the data to a more accessible medium. In fact, the rarity value of historic material is usually the greater the longer it has been out of regular circulation. What is important is that the information in those observations be captured in useable form before it becomes "virtual" in the most unfortunate sense of the word.

Elizabeth Griffin remg@astro.ox.ac.uk

### A Modest Request Concerning Online Catalogs Dear Editor:

Within the past week I have had two occasions to download extensive catalogs from the authors' web sites; one was about 150 lines long while the other was 9000 lines. I wanted to load each one into a spread sheet to look at a variety of correlations within each catalog and for comparison with other data compilations. In both cases it was difficult due to the use of spaces (often of variable number) between fields and even within a field. Thus, the strict columnar nature of the table was lost.

The purpose of this letter is to request authors to produce tables for downloading that have unique delimiters between fields. No matter what type of computer system a user has, such uniqueness will be extremely helpful to possible users of tabular data. Having the table in this form will also allow for easy conversion to the format needed for publication.

Steve Shawl shawl@ukans.edu

### Institutional Updates Don't Just Happen...

Only when we are notified by **institutions** of changes to address information do the lists in the back of *Directory* get updated. We don't have a staff of elves calling each Department to verify information, so please, if you find this part of the *Directory* helpful, help us keep it current.

Send any changes to address@aas.org by **3 August 2001** for inclusion in next year's *Directory*.

### **Member Deaths Noted**

Since the March *Newsletter*, the Society is saddened to learn of the deaths of the following members and former members:

James H. Bartlett Fred C. Gillett Adrian D. Herzog Jacqueline S. Kloss Natalie Mandzhavidze Reuven Ramaty Newton G. Sprague Thomas L. Swihart Arthur B. C. Walker, II Herbert A. Zook

### PRESIDENT'S COLUMN

Continued from page 1

### What we can do:

Astronomy has strong champions on Capitol Hill. Senator **Kit Bond** (R-MO) and **Barbara Mikulski** (D-MD) have worked hard in the past to ensure enough funding for NSF and they will continue to do so this year. Senator Bond offered an amendment on the floor of the Senate in April that provides increased funding allocations for science in the Senate budget resolution. This is a positive first step in the funding cycle for FY 2002.

I call upon AAS members to be active in their support of increases for NSF by writing – and visiting – their members of Congress frequently.

The AAS continues to support increasing the entire NSF budget, believing that a "rising tide floats all boats." During the summer and fall, I call upon AAS members to be active in their support of increases for NSF by writing their members of Congress frequently. Better yet, plan to visit with your legislators during Congressional recess while

they are in the home district. I cannot emphasize enough the importance of this type

### of contact.

The AAS cannot succeed alone, and we cannot afford to let Washington insiders be the only source of input to Congressional leaders. We are engaged in work with coalitions of science, engineering and technology associations to actively lobby Congress for increases in R&D funding government wide, and particularly for basic research. Only through constant communication and education can we hope to raise the awareness of Congress to the importance of basic research and receive adequate and appropriate funding levels.

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*Items of general interest* to be considered for publication in the *Newsletter* should be sent to lscholz@aas.org. Appropriate pictures are welcomed. Further information about deadlines and submitting articles, see http://www.aas.org/publications/newsletter.html.

Letters to the Editor on current issues of importance to astronomers are welcomed. Letters must be signed and should not exceed 250 words. Letters must be received by Jeff Linsky, Associate Editor, Letters, no later than one week prior to the Newsletter deadline (above). You may contact Jeff Linsky by email jlinsky@jila.colorado.edu, Tel: 303-492-7838, or FAX: 303-492-5235. The Associate Editor may edit letters, but will consult with authors before doing so. Letters will be published at the discretion of the Editors.

Items submitted for the AAS *Newsletter* are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to ela@aas.org.

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### AAS PRIZE WINNERS

#### Continued from page 1

Caltech Astronomy Department. He was Executive Officer for Astronomy there from 1975 to 1981. He has been Ira S. Bowen Professor of Astronomy since 1981. For the past three years he was Director of the Palomar Observatory.

This is not to say that Sargent has been content to teach and pursue his research on just one side of the Atlantic; almost every year since settling in the US, he has been Visiting Fellow at institutions throughout Europe and in Australia. It is notable that, at the same time, he has managed to serve the community on one or another important science committee including the Committee on Space Astronomy and Astrophysics (1975-1978) of the National Academy of Sciences (NAS); the Astronomy and Astrophysics Survey Committee (1989-1991), the "Bahcall Committee," NAS; and the Editorial Board of the *Annual Reviews of Astronomy and Astrophysics* (1977-1981).

The community has honored Sargent for his service and his science along the way. He is only the third person — along with John Bahcall and Riccardo Giacconi — to win three of the major awards in astronomy, the Warner Prize, the Heineman Prize and the Russell Lectureship. He received the AAS Helen B. Warner Prize, awarded to early career scientists, in 1969; the American Institute of Physics and the AAS joint Dannie Heineman Prize in 1991; the Astronomical Society of the Pacific's Catherine Wolfe Bruce Gold Medal in 1993; and in 1995 he was Harvard University's Sackler Distinguished Lecturer. Sargent is a Fellow of the American Academy of Arts and Sciences; the Royal Society; and is an Associate of the Royal Astronomical Society.

It is more than fitting now that he should receive the highest honor the AAS can bestow, the Henry Norris Russell Lectureship. Wallace Sargent will give his Russell Lecture at the Washington, DC Meeting of the AAS in January 2002 where his wife, AAS President Anneila Sargent, will be on hand to make the presentation.

# **Drake Wins New AAS Education Prize**

**Frank D. Drake**, of the SETI Institute, and Professor Emeritus of the University of California, Santa Cruz, is awarded the AAS Education Prize, which recognizes outstanding contributions to the education of the public, of students and of the next generation of professional astronomers. Drake originated the famous "Drake Equation," used to estimate the probability of detecting radio signals from extraterrestrial civilizations in the Milky Way galaxy.



Frank D. Drake of UC Santa Cruz and the SETI Institute is the first winner of AAS's new Education Prize.

The citation for his award reads, "Dr. Frank Drake is awarded the AAS Education Prize in recognition of his inspiration and leadership in many areas of education and public outreach in astronomy. His wide-ranging popularizations, his tireless help for journalists, and his championship of education and public information through the SETI Institute have helped scientists, educators, and the world at large to think rationally about life in the cosmos. His innovative courses in astronomy for non-science majors, his mentorship of undergraduate and graduate astronomy students, and his development of the science of SETI through Project OZMA, the Drake Equation, and now Project Phoenix have brought the excitement of the cosmic quest to several generations. In the process, he has educated us all."

Drake completed his undergraduate studies in engineering physics at Cornell University and his graduate studies at Harvard, earning a PhD in astronomy in 1958. Between the two he served a three year stint in the Navy as an electronics officer. After Harvard he spent five years with the National Radio Astronomy Observatory at Green Bank where he headed telescope operations there and designed the first organized search for extraterrestrial intelligence, the OZMA Project.

In 1963-1964 he was at the Jet Propulsion Laboratory and for the next twenty years (1964-1984), Drake was in the Astronomy Department at Cornell and for half of that



Bruce Elmegreen, IBM's only research astrophysicist, wins 2001 Dannie Heineman Prize for Astrophysics.



Princeton University's Uros Seljak is this year's Warner Prize winner.

time was also either the Director of the National Astronomy and Ionosphere Center or the Arecibo Observatory. It was from Arecibo that he used radio waves to transmit from our planet the first interstellar message to extraterrestrial civilizations.

In 1984, Drake moved to the University of California, Santa Cruz Astronomy and Astrophysics Department and also, first as Dean of the Division of Natural Sciences and later, Associate Vice-Chancellor for University Advancement. In 1984 he became President of the SETI Institute where he is currently Chairman of the Board.

Drake is a member of the National Academy of Sciences and a Fellow of both the American Association for the Advancement of Science and the American Academy of Arts and Sciences. He has served on three Astronomy Survey Committees of the National Academy of Sciences National Research Council (NRC) and was Chair of the Board on Physics and Astronomy from 1989-1992. He has been a member of the advisory board of *The World Book Encyclopedia*, and was on the editorial board of *Science Year* and the *Astrophysical Journal*. Drake was a Councillor of the AAS from 1976 to 1979.

The Education Prize is the newest of the AAS prizes and is made possible largely through the generous gift of Donat and Maria Wentzel.



Kenneth R. Sembach of Johns Hopkins University has won the Pierce Prize for 2001.



ADS visionary Michael Kurtz of the SAO has won the 2001Van Biesbroeck Prize.

# Elmegreen Wins 2001 Heineman

Bruce G. Elmegreen, a research staff scientist at International Business Machines Corporation, has won the 2001 Dannie Heineman Prize for Astrophysics. In making its selection, the Prize Committee wrote, "Dr. Elmegreen's contributions span a remarkable range from theoretical studies of key processes in the interstellar medium to the physics of galaxy-wide starbursts, to investigations of dynamical features, including spiral arms and bars, in galaxies. His work is notable for its strong connections to observations, and its emphasis on producing testable theoretical predictions, that have advanced our understanding of fundamental processes in the cosmos."

Elmegreen received his PhD in 1975 at Princeton University under the guidance of the late Lyman Spitzer, Jr., and spent three years as a Junior Fellow at

Harvard. He joined IBM in 1984 after holding a faculty position at Columbia University. Dr. Elmegreen works in the Physical Sciences Department of the Research Division of IBM. His main research interests are in fields of star formation, interstellar matter, and galactic structure. He currently serves the American Astronomical Society as Chair of the Publications Board.

### **Newton Lacy Pierce Prize to Sembach**

The Newton Lacy Pierce Prizefor 2001 has been awarded to **Kenneth R. Sembach** of the Johns Hopkins University Department of Physics and Astronomy. The prize is usually awarded annually for outstanding achievement in observational astronomical research based on measurements of radiation from an astronomical object over the past five years. Sembach was cited by the Committee "in recognition of work which has been important in increasing our understanding of the structure and elemental abundances of the gaseous component of the galaxy, especially of the galactic halo, as well as in discovering new facets of the high velocity cloud phenomenon in the galactic periphery."

Sembach received his PhD in 1992 from the University of Wisconsin, Madison where he studied with B. D. Savage. He was a NASA Hubble Fellow at MIT from 1992-1995 and was then sponsored research staff at MIT until 1996. In 1996, he

went to Johns Hopkins University to continue his research and to become FUSE Deputy Project Scientist for Large Team Programs. He is currently Research Scientist at Johns Hopkins and continues in his position with FUSE.

# Seljak Wins Helen B. Warner Prize

The Helen B. Warner Prize for Astronomy, usually awarded annually for a significant contribution to observational or theoretical astronomy during the five years preceding the award, is presented to **Uros Seljak** of Princeton University. In making its selection, the committee stated that Dr. Seljak is awarded the Warner Prize for 2001 "for his contributions to the theoretical understanding of the cosmic microwave background anisotropies and to the development of numerical and analytical tools that have been widely adopted for the comparison of observational data and cosmological models in that area."

Seljak earned his BS and Masters Degrees at the University of Ljubljana in Slovenia. In 1991, he continued his studies at MIT in the Department of Physics concentrating on theoretical astrophysics. He received a PhD in 1995 after studying with E. Bertschinger. He was a Harvard-Smithsonian Fellow at the Center for Astrophysics from 1995 to 1998. He travelled to the Max-Planck-Institute for Astrophysics to pursue his research for six months after which, in early 1999, he joined the Princeton Department of Physics where he is currently assistant Professor. At Princeton, he has been a David and Lucille Packard Fellow and an Alfred P. Sloan Fellow.

### Van Biesbroeck to SAO's Kurtz

This year's winner of the George Van Biesbroeck Prize is Astronomer and Computer Scientist **Michael J. Kurtz**, of the Smithsonian Astrophysical Observatory (SAO). The Van Biesbroeck Prize is given annually to honor a living person for long-term extraordinary or unselfish service to astronomy, often beyond the requirements of the person's paid position.

In making the award, the prize committee described Kurtz as "the visionary designer of the Astrophysics Data System (ADS) which clearly has revolutionized for over a decade the speed and thoroughness in which astronomers now can search and access the vast and still growing technical literature." They further commented that "[h]e started with a new and efficient algorithm to search the literature, and has masterminded the design of the online abstract service within ADS. It is impressive to note that the formative years of ADS-development were quite on his own; Kurtz then was without institutional support for the system. He devoted his time and energy in an unselfish manner to constantly improve a system upon which we now all depend."

Kurtz received his PhD in Physics from Dartmouth College in 1982; his doctoral thesis was on stellar spectral classification systems. He did postdoctoral work at Dartmouth, was a lecturer in astronomy at Harvard University and Astronomer at SAO from 1982. He become director of the Image Processing Laboratory, SAO, in 1984. He has been invited to lecture widely around the world since 1983 on data analysis, access to data and wide field spectrographic imaging.

# **PUBLISHING** WHY OBSERVATORY REPORTS?

Virginia Trimble and Bob Milkey (Reprinted from AAS Newsletter 100, June 2000).

This is the advice offered by your Council and members thereof who were responsible for such a report/such reports in the last few years.

# Why should we bother to prepare an annual report? After all, we have a Web page.

There are several answers to this:

*Comparison shopping.* Think of a graduate student wanting to compare the various institutions she might apply to or attend. There is your institution and the competition all in one place, saving the sequential search.

*Reprints.* These can be sent to potential students and strong candidates for postdoctoral and faculty positions as a tangible expression of your interest in them.

*Raising your profile*. Editors seeking referees, nominating committees seeking candidates, and staff at sponsoring agencies seeking peer reviewers have all told us they consult these reports for names of people working on particular topics at institutions they might not have thought of. Of course you feel a certain ambivalence about being asked to referee, run, or review. But collectively it is good for your institution (and you) to be doing these things.

*Think of the historians.* Web pages come and go and are generally not archived. Records of who was where, when and what they were working on and with whom are of long-range value, and a *BAAS* report is one of the easiest ways of preserving this information.

### What if I have to do it?

No, it isn't entirely beer and skittles. In particular, when your colleagues finally send you the information needed, they seem to think they are doing you (rather than themselves and your communal institution) a favor. BUT, much of what you need is relatively easy to come by:

Lists of staff and staff changes, including PhD and MS recipients and where they have gone. You already have much

### Manuscript Submissions using AASTeX

The AJ and ApJ accept manuscripts electronically that are prepared using the AASTeX manuscript package. Following are some important addresses for obtaining information about AASTeX and electronic manuscript submission.

### **AASTeX Homepage:**

http://www.journals.uchicago.edu/AAS/AASTeX/

### **User Support:**

aastex-help@aas.org

### Journal Homepages/Manuscript Submission:

AJ: http://www.journals.uchicago.edu/AJ/

*ApJ*: http://www.journals.uchicago.edu/ApJ/

ApJL: http://cfa-www.harvard.edu/apjl/

of this on your departmental directory (real or virtual). The observatory or department administrator or the boss's secretary probably has the rest;

*Honors and such.* This is an easy part. Most of your colleagues will respond promptly to a blanket email asking them to brag if they were elected to something (from the NAS on down to AAS Council), received a prize or a major grant, or were otherwise recognized as among the great and good;

*Education and outreach.* If you don't know what your department is doing, now is the time to find out! What major institutional initiatives have been undertaken during the year? Have you joined a telescope consortium, built a major instrument, or any other thing worthy of description for the record? Have you closed or decommissioned a telescope, instrument, or other major facility?

*Lists of publications.* These can, if necessary, be culled from CVs on file. But a good place to start is to ask the graduate students for publications bearing their names. Most of them are still rather pleased to be publishing and to have other people know about it. You can even list theirs first if you want to.

Summary of ongoing, not yet published, work. Yeah, this is the hard one. But again, students and junior staff are likely to respond quickly, and their projects will include many joint ones with senior staff or faculty, thereby picking up some of their work as well. And, finally, just ask, with a back up threat of some sort (e.g. if you don't provide the requested paragraph about what you are doing, I'll write it myself!).

*Deadlines.* Whatever you do, someone will be angry. If you are honest and say exactly when you must have the information to make *BAAS* deadlines, you will be accused of rigidity (or anal retentiveness or worse). If you cheat and allow a little slop, you will be accused of dishonesty. But no worthwhile task was ever accomplished without a few harsh words being said (and usually regretted).

Observatory reports may be submitted anytime before **1 November**. Reports submitted in LaTeX will be posted in the electronic *Bulletin of the American Astronomical Society* (*BAAS*) within three weeks of receipt. All reports submitted by 1 November will be published in the paper edition *BAAS*, No. 1, which is distributed in late February of the following year. Follow the formatting and submission instructions at http://www.aas.org/publications/baas/baas.html.

### **NEW MEMBERSHIP STAFF**

The AAS Executive Office is pleased to welcome to its staff **Dennis W. Renner**, who will be assuming Sharon Savoy's duties at the helm of the Membership Department. He can be reached at drenner@aas.org M-F. Some of the many services he will be handling are: new Memberships, renewals and invoicing; Member journal and publication subscriptions; Corporate and Publisher Memberships; mailing list requests; Division membership records; and overall database maintenance. Dennis comes to us with a broad experience in non-profit and membership associations and we are so pleased to have him on board.

### **Usage Survey of Eprint Archives**

Stevan Harnad, Professor of Cognitive Science, University of Southampton, harnad@cogsci.soton.ac.uk

A survey at http://www.eprints.org/survey/ is being conducted on current users and non-users of Eprint Archives. The survey results will be shared with the AAS.

The purpose of the survey is to determine who is and is not using such archives at this time, how they use them (if they do), why they do not use them (if they do not), and what features they would like to have added to them to make them more useful. The survey is anonymous. Revealing your identity is optional and it will be kept confidential. The survey consists of about 72 web-based questions, and comes in four versions:

FOR PHYSICISTS, ASTROPHYSICISTS, MATHEMATICIANS:

1. arXiv Users

2. arXiv Non-Users

FOR COGNITIVE SCIENTISTS (Psychologists, Neuroscientists, Behavioral Biologists, Computer Scientists (incl. AI, robotics, vision, speech, learning), Linguists, Philosophers) and OTHER DISCIPLINES:

3. CogPrints Users

Na

4. CogPrints Non-Users

### **Member Discount Program** Annual Review of Astronomy & Astrophysics

The AAS and the Annual Reviews, Inc. are pleased to offer for another year discounted subscriptions to the 2001 Annual Review of Astronomy and Astrophysics. AAS Members with 2001 dues paid in full are eligible to order Volume 39 at a substantial savings off the list price.

Members who currently have a standing order for the Annual Review of Astronomy and Astrophysics must first contact ANNUAL REVIEWS, Inc. (1-800-523-8635) to cancel the standing order before qualifying for the AAS discount. The AAS will accept orders only for the current year volume; orders for back volumes or other Annual Reviews series should be placed directly with Annual Reviews, Inc.

Fax or mail the order form below to the AAS before 1 August 2001. The volume will be shipped in October 2001 directly from the publisher. If you have questions, call the AAS Membership Department at 202-328-2010 or the Annual Reviews, Inc. at 1-800-523-8635.

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# THE TREASURER'S DESK

Leonard V. Kuhi, Treasurer, kuhi@astro.umn.edu

# Past and Present Generosity: What Will the Future Hold?

This issue of the *Newsletter* features the American Astronomical Society's prize winners for this year. The prizes and awards recognize outstanding achievement ranging from research by young astronomers to lifetime accomplishments of more senior individuals. The prizes all have one thing in common: they owe their very existence to the generosity of people in the past who have provided the funds for the prizes by direct gifts or bequests to the Society. However, in order to maintain these funds and also provide for new prizes, we call upon the generosity of the present membership.

The Society established two new prizes recently: an education prize and an instrumentation prize to recognize outstanding accomplishments in those areas. The education prize fund has been started with a generous gift from **Donat and Maria Wentzel** who will match every two dollars in other gifts to that fund with one dollar of their own. This is a wonderful opportunity to make your own gift to the education fund even more effective because of Wentzel's matching challenge. The education prize has been awarded this year for the first time (see page 4). Ongoing programs also require increased funding to keep pace with growing costs. Very generously, **A. G. D. Philip** and **Frank K. Edmondson** each pledged up to \$5,000 to match, one-for-one, donations by AAS members to the Shapley lecture endowment. I am happy to report that the membership met this challenge within the past two years.

Finally, the Society, in celebrating its first 100 years, established the Second Century Lectures: distinguished astronomers presenting public lectures on a variety of hot astronomical research topics across the country. During the first year, three Second Century Lectures were given with great success, and the program continues with five scheduled for 2001 (see opposite). However to continue these Lectures, additional funds are needed to properly support the program. This is another opportunity for you to show your own generosity by making an appropriate gift to the Society. **Frank Edmondson** kindly offered to match member donations, at the rate of one-to-one up to \$5,000 for these Lectures.

The prizes and lectures highlight the best of the AAS and we encourage you to be as generous today as individual Society members have been in the past. Give and give generously! All contributions are *tax-deductible* and should be sent to the AAS Executive Office in Washington. Your gift can be designated for a specific purpose or left unrestricted.

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# Second Century Lecture Series: A Successful Two Years

Neta A. Bahcall, Chair, AAS Century Lecture Series, neta@astro.princeton.edu

Our recent initiative, The AAS Second Century Lecture Series, is now in its second year. This important outreach program aims to bring the fascinating developments in astronomy to the public. The Century Lectures provide a series of outstanding public talks, given throughout the in planetaria, science centers, science museums, colleges, universities, astronomical amateur associations: any place where the public interests reside. The lectures highlight the most interesting areas of current astronomical research and present the exciting findings to the public. Topics cover the broad range of astronomical discoveries from our solar system, to extra-solar planets, stars, and black-holes, to the beginning of the universe, its expansion and its future. The series is currently budgeted for about four lectures per year. The lectures are delivered by the Second Century AAS Lecturers, outstanding scientists who are also excellent public speakers; the

### 2000-2001 AAS Second Century Lectures

Prof. Robert Kirshner, Harvard University "Runaway Universe?" University of Minnesota, MN — May 5, 2000

**Prof. Anneila Sargent**, Caltech "From Dust To Us" Hayden Planetarium, NY — June 20, 2000 (solstice)

**Prof. Neil Tyson**, American Museum of Natural History, NY "The Search for Life in the Universe Through the Lens of an Urban Astrophysicist" National Air and Space Museum, Washington, DC — December 7, 2000

**Prof. Andrea Ghez**, UCLA "Unveiling a Black Hole at the Center of the Milky Way Galaxy" Reuben H. Fleet Science Center, San Diego, CA — January 9, 2001

Prof. Vera Rubin, DTM, Washington, DC "What's the Matter in the Universe?" Foothill College, The Astronomical Society of the Pacific, NASA's AMES Research Center, and SETI Institute, Co-host a special event in the Silicon Valley Astronomy Lecture Series Los Altos Hills, CA — May 2, 2001

> **Prof. Joe Taylor**, Princeton University "Orbiting Pulsars and Relativistic Gravity" Adler Planetarium, Chicago, IL — May 11, 2001

**Prof. Paul Butler**, DTM, Washington, DC "Extrasolar Planets: First Reconnaissance" University of Victoria, British Columbia, Canada — October 2001 (TBA)

Prof. Alex Filippenko, UC Berkeley California State University, Fresno, CA — October 2001 (TBA)

Prof. Paul Butler, DTM, Washington, DC "Extrasolar Planets: First Reconnaissance," Washburn University and the American Association of Amateur Astronomers Convention Washburn University, Topeka, KS — June 8, 2002

list of thirty current AAS Second Century Lecturers is posted on the AAS Website. Each lecture is organized by a host institution; each institution can select among the different topics and speakers. The lectures are widely advertised, both locally (at each venue town) and nationally. Our goal of attracting large audiences and reaching as broad a public as possible has been successful: the program has reached thousands of people since its inception in 2000, with outstanding public lectures (see box at left). The AAS supports advertisement for the lectures and some local venue expenses if needed, as well as travel expenses for the Lecturer.

Institutions interested in hosting an AAS Second Century Lecture over the next few years, or suggestions for appropriate venues for the lectures, are welcome. Please send such information or requests to me at neta@astro.princeton.edu (or to me at Princeton University).

# **EDUCATION NEWS**

Bruce Partridge, Education Officer, bpartrid@haverford.edu

### **Planning AAS Educational Activities**

This summer and fall, the Astronomy Education Board (AEB) will be drafting the next "Long Range Plan for AAS Educational Activities." We hope to conduct this exercise with input and advice from the Director of Educational Activities of the AAS, whom we hope will have been appointed by the time the planning activities are fully underway.

On behalf of the AEB, I'm writing to solicit suggestions from all AAS members on the focus AAS educational activities should have over the next three years. I would ask you to remember that our resources are limited, and that most of us are more familiar with undergraduate and graduate education than with K-12 education. You may review the current AAS Long Range Plan for Education at http://www.aas.org/education/LongRange.html. You may also wish to have a look at the education and public outreach recommendations of the most recent Decadal Survey. We believe AAS educational activities are broadly consistent with the recommendations of the Astronomy and Astrophysics Survey Committee, but reading the Survey report may give you some additional ideas on what we as a Society can do in the very important arena of astronomy education and science education more generally.

### Status: Director of Educational Activities

The Society has been actively recruiting for this position, but to date has only a small number of qualified applicants. Because this is a critical position, the Search Committee has extended the deadline to develop a larger, more diverse pool before determining an interview shortlist. Recruitment for this position will remain open until, in the judgment of the Search Committee, there is an adequate pool of qualified applicants from which to draw a shortlist.

We continue to encourage inquiries and applications from persons with experience in and commitment to astronomical education, especially at the undergraduate level. This position is **Job 11702** at http://www.aas.org/JobRegister/no11702.html in the AAS *Job Register*. Inquiries regarding the position may be addressed to Bob Milkey, milkey@aas.org, or (202) 328-2010.

# **HONORED ELSEWHERE**

### **AAUW Confers Cannon Prize on Barger**



Amy Barger of the University of Wisconsin and Hawai'i's Institute for Astronomy has won the 2001 AAUW Annie Jump Cannon Prize.

Amy J. Barger of the Institute for Astronomy, University of Hawai'i at Manoa has been awarded the Annie Jump Cannon Award for 2001 by the American Association of University Women (AAUW). Barger's winning research program is to investigate the properties of sources that make up the X-ray background using two ultra-deep X-ray observations obtained by the Chandra X-ray Observatory and a comprehensive suite of multi-wavelength observations (optical/infrared imaging and spectroscopy and

submillimeter and radio imaging). Barger will use optical imaging data to identify the counterparts to the Chandra X-ray sources and characterize their spectral energy distributions. Follow-up spectroscopic observations will be undertaken to determine the redshifts and spectral characteristics of the sources. Submillimeter observations, made with the SCUBA camera on the James Clerk Maxwell Telescope, can potentially be used to determine if the X-ray background sources are highly obscured active galactic nuclei. High-resolution radio data will provide accurate positions of the submillimeter sources and serve as a check that the far infrared-radio correlation continues to hold at high redshift. With her new data, Barger will be able to estimate accretion times and bolometric luminosities for the sources that make up the X-ray background at high energies and ultimately use this information to obtain a map of the accretion history of the Universe.

Barger was a Marshall scholar at King's College at the University of Cambridge where she received her PhD in astronomy in 1997. She is currently a Hubble Fellow and a Chandra Fellow at Large at the University of Hawai'i, where she is conducting research while on faculty leave from the University of Wisconsin. She was appointed to an assistant professorship in the Department of Astronomy at the University of Wisconsin in 2000.

In making the award, the AAUW noted that even at this early stage in her career, "...Dr. Barger has an impressive number of publications and conference papers to her credit. In addition, she has secured a grant from the National Science Foundation through 2003 to continue her research."

The Annie Jump Cannon Award in Astronomy honors a woman postdoctoral scholar for significant research in astronomy. The award was established by the American Astronomical Society (AAS) in 1934. Its administration was transferred in 1974 to the AAUW Foundation, which now oversees the award in cooperation with AAS. The award carries a stipend of \$5,000.

### Three from AAS Elected to the Academy

The following AAS Members were elected to the National Academy of Science on 1 May 2001:

**Charles Alcock**, professor, Department of Physics and Astronomy, University of Pennsylvania; recipient of Beatrice M. Tinsley Prize, 2000.

Alexander Dalgarno, physicist, Smithsonian Astrophysical Observatory; Phillips Professor of Astronomy, Harvard-Smithsonian Center for Astrophysics; and Editor, *Astrophysical Journal Letters*.

Among the newly elected foreign associates is AAS Member, **Ewine F. Van Dishoeck**, professor of molecular astrophysics, Leiden Observatory, Leiden University, Netherlands.

The National Academy of Sciences is a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare. It was established in 1863 by a congressional act of incorporation, signed by Abraham Lincoln, that calls on the Academy to act as an official adviser to the federal government, upon request, in any matter of science or technology. Election to membership in the Academy is considered one of the highest honors that can be accorded a US scientist or engineer.

### NAS Watson Medal to Wilkinson

AAS Member **David T. Wilkinson**, Cyrus Fogg Brackett Professor of Physics at Princeton University, has been awarded the James Craig Watson Medal for "elegant precision measurements by Wilkinson, his students, and their students, of universal radiation that is close to blackbody yet wonderfully rich in evidence of cosmic evolution." The Medal and a prize of \$25,000 for contributions to the science of astronomy has been awarded every third year since 1887 and was established by a bequest from James C. Watson. The award was presented on 30 April at a ceremony in Washington, DC, during the Academy's 138<sup>th</sup> annual meeting.

### **Physics Teachers Honor Trimble**

Former AAS Vice-President **Virginia Trimble** of UC Irvine and the University of Maryland will be the 2001 Klopsteg Memorial Lecturer of the American Association of Physics Teachers (AAPT). Trimble will give her talk, entitled "Cosmology: Man's Place in the Universe (a Deconstruction)," at the July 2001 AAPT Summer meeting in Rochester, New York. In accordance with the award specifications, the talk will be "of current significance suitable for nonspecialists."

Recent Klopsteg Lecturers have been Terrence P. Walker and Michael S. Turner. This award, established in 1990, is given in memory of Paul Klopsteg, a principal founder, a former President, and a longtime active member of AAPT.

### **Ramaty Recognized for Cosmic Ray Physics**

The late **Reuven Ramaty** of the Goddard Space Flight Center was awarded the 2001 Yodh Prize of the Cosmic Ray Commission of the International Cosmic Ray Conference and the University of California Irvine. He was cited "for significant and outstanding contributions to the field of cosmic ray astrophysics." He was to receive the award at the 27<sup>th</sup> International Cosmic Ray Conference in Hamburg, Germany in August. He died on 8 April 2001, but not before he had been informed of this honor.

### **Three From AAS Newest RAS Associates**

AAS President Anneila Sargent and long-time AAS Members Franco Pacini (current President of the International Astronomical Union), and Virginia Trimble were among those elected as Foreign Associates of the Royal Astronomical Society (RAS) in 2001. Associates are astronomers not normally resident in the UK (several dozen countries are represented) and are generally selected for having performed some service to the astronomical community beyond their own research. The RAS Council typically selects six per year.

### Four Elected to the AAAS

AAS Members Robert C. Kennicutt. Robert Rosner. Gerald Schubert and Stanford E. Woosley have been elected to membership in the American Academy of Arts and Sciences.

### **CHANDRA Fellows Named**

Five scientists, all AAS Members, have been chosen as Fellows of the fourth annual Chandra X-ray Observatory Postdoctoral Fellowship Program: Elizabeth Blanton, of Columbia University will be hosted by the University of Virginia; the Harvard-Smithsonian Center for Astrophysic will host Li-Xin Li of Princeton; Andisheh Mahdavi, Harvard University, will be hosted by the University of Hawai'i;

Chunhua Qi of Caltech and CfA

is speaking in the Protostellar Disks Topical Session.

Erik Reese, University of Chicago, will be hosted by the University of California at Berkeley; and, Masao Sako, Columbia University, will be hosted by the California Institute of Technology.

The fellowships are open to recent astronomy and astrophysics graduates worldwide. They will work for three years at an astronomical host institution in the United States on problems broadly related to the scientific mission of the Chandra Observatory. The Chandra X-ray Observatory Fellowship Program is a joint venture between NASA and the Chandra X-ray Observatory Center in cooperation with the host institutions. Applications for next Fellowship competition will be due on a date to be specified in November 2001. Further information about the Fellowship program is available at http://cxc.harvard.edu/fellows/Chandra fellow.2001.html. We encourage institutions interested in being host institutions to send us brief descriptions of your facilities, which we will post on our website for potential applicants to read.

# Gunn, Tarter Honored by the Canadians

See CANADA NEWS, page 20.

Continued on page 21

# Five Win "Abstract Before Osterbrock"

In response to our December Newsletter appeal that abstracts for the Pasadena meeting be submitted before the deadline, we are pleased to report that five AAS Members have gotten theirs in before Don Osterbrock's! The winners of the ABO Award are as follows:



Scott Sanford of NASA's Ames will talk about organic molecules in space.



Andrew Blain of the Institute for Astronomy, Cambridge, UK is presenting his SCUBA findings.

The first abstract received was for poster paper 4.09 of NASA Ames lead author Scott A. Sandford entitled "Identifying Organic Molecules in Space - The AstroBiology Explorer (ABE) MIDEX Mission Concept" by S. A. Sandford, L. J. Allamandola, J. Bregman, K. Ennico, T. Greene, D. Hudgins (NASA-Ames), D. Strecker (Ball Aerospace);

> The second abstract to hit the server was submitted bv Chunhua Qi of Caltech and Harvard-Smithsonian Center for Astrophysics, for oral paper 18.05 entitled "Aperture Synthesis Studies of the Chemical Composition of Protoplanetary Disks and Comets;"

Third was the abstract for Claus Leitherer's STScI's Claus Leitherer will (STScI) oral paper 67.07 entitled, "Modeling of Starburst Populations;"

Andrew W. Blain (Institute of Astronomy, Cambridge, UK) submitted the fourth to arrive, an abstract for oral paper 34.20 entitled "Cosmological Implications of the SCUBA Sources;" and

Lastly (before Osterbrock's, but not least!), A. G. Davis Philip submitted an abstract for display paper 46.08, entitled "The Meeting in Honor of Cecilia Payne-Gaposchkin," by A. G. D. Philip (ISO & Union College), R. A. Koopmann (Union College).

The Executive Office thanks the winners for rising to the challenge of early abstract submission. We are pleased to note that 49.5% of the 774 total Pasadena abstracts were submitted before the deadline!

Thanks for this and particularly thanks for the good natured response of the ABO winners when their worst suspicions were confirmed: there is no monetary value, certificate or lectureship associated with this Award;



deliver a talk on modeling starbursts.



Union College professor A. G. Davis Philip has edited the proceedings of a meeting honoring C. Payne-Gaposchkin.

only the undying gratitude of the AAS Staff!

# CALENDAR

Listed below are meetings that have come to our attention (new or revised listings noted with an asterisk). Due to space limitations, we publish notice of meetings 1) occurring in North, South and Central America; 2) meetings of the IAU; and 3) meetings as requested by AAS Members. Meeting publication may only be assured by emailing lscholz@aas.org. Meetings that fall within 30 days of publication are not listed.

A comprehensive list of world-wide astronomy meetings is maintained by Liz Bryson, Librarian C-F-H Telescope in collaboration with the Canadian Astronomy Data Centre, Victoria, BC. The list may be accessed and meeting information entered at http://cadcwww.hia.nrc.ca/meetings.

### **AAS and AAS Division Meetings**

Division for Planetary Sciences 27 November–1 December 2001 — New Orleans, LA Contact: S. Alan Stern (alan@everest.space.swri.edu)

199<sup>th</sup> Meeting of the AAS 6–10 January 2002 — Washington, DC Contact: AAS Executive Office (aas@aas.org)

High Energy Astrophysics Division (with Division of Astrophysics of APS) 20–23 April 2002 — Albuquerque, NM Contact: Alice Harding (harding@twinkie.gsfc.nasa.gov)

\*200<sup>th</sup> Meeting of the AAS 2–6 June 2002 — Albuquerque, NM Contact: Harjit Ahluwalia (hsa@unm.edu)

\*201<sup>st</sup> Meeting of the AAS 5–9 January 2003 — Seattle, WA Contact: Diana Alexander (diana@aas.org)

### **Other Events**

Royal Astronomical Society of Canada 28 June –1 July 2001 — London, Ontario, Canada Contact: Peter Jedicke (pjedicke@fanshawec.on.ca) http://phobos.astro.uwo.ca/~rasc/home.html.

\*3<sup>rd</sup> International Workshop on Astronomy at Dome C 28–29 June 2001 — Hobart, Tasmania, Australia Contact: Paolo Calisse (pcalisse@phys.unsw.edu.au) http://www.phys.unsw.edu.au

\*Astronomical Society of Australia, Annual Scientific Meeting 1–4 July 2001 — Victoria, Australia Contact: Brad Gibson (bgibson@swin.edu.au) http://astronomy.swin.edu.au/asa2001

5<sup>th</sup> Biennial History of Astronomy Workshop 5–8 July 2001 — Notre Dame, IN Contact: Steve Dick (dick.steve@usno.navy.mil) http://www.nd.edu/histast4

XXI International Congress of History of Science 8–14 July 2001 — Mexico City, Mexico Contact: Juan Jose Saldana (xxiichs@servidor.unam.mx)

\*The Square Kilometer Array (SKA): Defining the Future 9–12 July 2001 — Berkeley, CA Contact: Jill Tarter (tarter@vger.seti.org) http://www.skatelescope.org/meeting/ IAU Symp. 208: Astrophysical Supercomputing using Particle Simulations 10–13 July 2001 — Tokyo, Japan Contact: iau208@grape.c.u-tokyo.ac.jp http://grape.c.u-tokyo.ac.jp/iau208/ 113th Annual Meet. of The Astronomical Society of the Pacific 13-18 July 2001 - St. Paul, MN Contact: meeting@aspsky.org http://www.aspsky.org/meetings/2001/home.html \*Center for Star Formation Studies Workshop: "Star Formation in the Galactic Context" 14-19 July 2001 - Santa Cruz, CA Contact: Cathy Clausen (cclausen@natsci.ucsc.edu) http://www-space.arc.nasa.gov/~csf/ ASP Symp.: "The High-Energy Universe at Sharp Focus: Chandra Science" 16-18 July 2001 - St. Paul, MN Contact: James White (director@aspsky.org) http://www.aspsky.org/meetings/science2001.html Statistical Challenges in Modern Astronomy III 18-21 July 2001 - University Park, PA Contact: Eric Feigelson (edf@astro.psu.edu) http://www.astro.psu.edu/SCMA \*Continuing the Challenge of EUV Astronomy: Current Analysis and Prospects for the Future 22-24 July 2001 - Jenner, CA Contact: Jennifer Cullison (jennifer@ssl.berkeley.edu) http://ssl.berkeley.edu/~euve/conference 9th International Workshop on Low Temperature Detectors 23-27 July 2001 — Madison, WI Contact: F. Scott Porter Itd-9@wisp.physics.wisc.edu http://wisp.physics.wisc.edu/ltd-9 IAU Coll. N.185: "Radial and Nonradial Pulsations as Probes of Stellar Physics" 26-31 July 2001 — Leuven, Belgium Contact: Conny Aerts (iau185@ster.kuleuven.ac.be) http://www.ster.kuleuven.ac.be/~iau185 SPIE International Symposium: "Astronomical Data Analysis" 29 July-3 August 2001 — San Diego, CA Contact: F. Murtagh (F.Murtagh@Queens-Belfast.ac.uk) http://www.spie.org/info/am \*The Lowest-Mass Galaxies and Constraints on Dark Matter 29 July-4 August 2001 — Heidelberg, Germany Contact: Eva Grebel (grebel@mpia-hd.mpg.de) 12th Cambridge Wrkshp: "Cool Stars, Stellar Syst., and the Sun" 30 July-3 August 2001 — Boulder, CO Contact: Thomas R. Ayres (cs12@casa.colorado.edu) http://casa.colorado.edu/~cs12/ The Earliest Stages of Massive Star Birth 6-8 August 2001 — Boulder, CO Contact: Kelsey Johnson (StarBirth@jila.colorado.edu) http://jilawww.colorado.edu/StarBirth

\*Meteoroids 2001 6–10 August 2001 — Kiruna, Sweden Contact: Asta Pellinen-Wannberg (asta@irf.se) http://www.irf.se/Meteoroids2001/.

\* 27<sup>th</sup> International Cosmic Ray Conference 7-15 August 2001 — Hamburg, Germany Contact: Arne Richter (cop@copernicus.org) http://www.copernicus.org/icrc Small Radio Telescopes in Modern Astronomy 9-11 August 2001 — Brevard, NC Contact: Michael Castelaz (mcastelaz@pari.edu) http://www.pari.edu/workshop Neutron Stars in Supernova Remnants (II) 14-17 August 2001 - Boston, MA Contact: Bryan Gaensler (psr\_snr@head-cfa.harvard.edu) http://hea-www.harvard.edu/PSR SNR \*Variable Stars-2001 20-24 August 2001 - Odessa, Ukraine Contact: Valentin Karetnikov (astro@paco.odessa.ua) \*ISSS-6: The Sixth International School/Symposium for Space **Plasma Simulations** 3-8 September 2001 — Garching, Germany Contact: Jörg Büchner (buechner@linmpi.mpg.de) http://www.copernicus.org/ISSS-6 Two Years of Science with Chandra 5-7 September 2001 — Washington, DC Contact: Harvey Tananbaum (ht@cfa.harvard.edu) http://asc.harvard.edu/symposium 2001.html 21st Sac Peak Workshop: "Current theoretical models and future high resolution solar observations: preparing for ATST." 17-21 September 2001 — Sunspot, NM Contact: Alexei Pevtsov (ws21@sunspot.noao.edu) http://www.sunspot.noao.edu/INFO/MISC/WORKSHOPS/index.html X<sup>th</sup> Latin-American Regional Meeting of Astronomy 17-21 September 2001 — Cordoba, Argentina Contact: Carlos Donzelli (xrrla@oac.uncor.edu) http://axp2.oac.uncor.edu/~xrrla/index.html \*Yohkoh 10<sup>th</sup> Anniversary Meeting: "Multi-Wavelength Observations of Coronal Structure and Dynamics" 17-20 September 2001 — Kailua-Kona, HI Contact: Piet Martens (martens@mithra.physics.montana.edu) http://solar.physics.montana.edu/y10/ International Meteor Conference 20-23 September 2001 - Cerkno, Slovenia Contact: Ina Rendtel (treasurer@imo.net) http://www.imo.net/news.imc.html \*Perspectives in Astrobiology 29 August-10 October 2001 — Chania, Crete Contact: Ron Koczor (ron.koczor@msfc.nasa.gov) http://natoasi.msfc.nasa.gov/ \*Astronom. Data Analysis Software and Systems (ADASS) XI 30 September-3 October 2001 — Victoria, BC, Canada Contact: Daniel Durand (adass@hia.nrc.ca) http://cadcwww.hia.nrc.ca/adass 2001 \*AAS SECOND CENTURY LECTURE "Extrasolar Planets: First Reconnaissance," by Paul Butler October 2001 (Day, to be announced) - Victoria, BC, Canada \*AAS SECOND CENTURY LECTURE Lecture by Alex Filippenko October 2001 — Fresno, CA

(Day and title to be announced)

Seeing Through the Dust: The Detection of HI and the Exploration of the ISM in Galaxies 20-26 October 2001 — Penticon, BC, Canada Contact: hi50@drao.nrc.ca http://www.drao.nrc.ca/~kerton/hi50.html IEEE 2001 Nuclear Science Symp. & Medical Imaging Conf. 4-10 November 2001 — San Diego, CA Contact: Anthony Lavietes (lavietes1@llnl.gov) http://www.nss-mic.org Gamma Ray Burst and Afterglow Astronomy 5-9 November 2001 — Woods Hole, MA Contact: George Ricker (grr@space.mit.edu) \*Disks of Galaxies: Kinematics, Dynamics and Perturbations 5–9 November 2001 — Puebla, Mexico Contact: Rosario Sanchez (secregh@inaoep.mx) http://www.inaoep.mx/~disks01/ghconf.html IAU Symposium No. 209: "Planetary Nebulae: Their Evolution and Role in the Universe" 19-23 November 2001 — Canberra, Australia Contact: Maartje Sevenster(pn symp@mso.anu.edu.au) http://www.mso.anu.edu.au/~pn\_symp/ \*Workshop on X-ray Spectroscopy of Active Galactic Nuclei with Chandra and XMM-Newton 3-6 December 2001 — Garching, Germany Contact: Thomas Boller (bol@xray.mpe.mpg.de) http://wave.xray.mpe.mpg.de/conferences/agnspec-workshop \*Galaxies: the Third Dimension 3-7 December 2001 — Isla Mujeres, Mexico Contact: Margarita Rosado (3dgal@astroscu.unam.mx) http://www.astroscu.unam.mx/3dgal \*"Galaxies: Mind Over Matter," A Celebratory Symposium for Vera Rubin 10-11 January 2002 — Washington, DC Contact: Sharon Bassin (sbassin@pst.ciw.edu) http://www.carnegieinstitution.org/rubinsymposium.html \*33rd Lunar and Planetary Science Conference 4-8 March 2002 — Houston, TX Contact: Cheryl Perry (perry@lpi.usra.edu) \*2nd Astrobiology Science Conference 7-11 April 2002 — Moffett Field, CA Contact: abscicon@mail.arc.nasa.gov http://astrobiology.arc.nasa.gov/conferences/2001 /ABSciConf/index.html \*AAS SECOND CENTURY LECTURE "Extrasolar Planets: First Reconnaissance" by Paul Butler 8 June 2002 — Topeka, KS \*IAU Symp. 210, "Modeling of Stellar Atmospheres" 17–21 June 2002 — Uppsala, Sweden Contact: Nikolai Piskunov (piskunov@astro.uu.se) http://www.astro.uu.se/iau210 34th COSPAR Scientific Assembly 1 October 2002 — Houston, TX Contact: cospar@paris7.jussieu.fr \*XXV<sup>th</sup> International Astronomical Union General Assembly 13-26 July 2003 — Sydney, Australia Contact: IAU Secretariat (iau@iap.fr)

# DIVISIONS **Dynamical Astronomy**

Marc Murison, Secretary

**Highlights: Houston Meeting** All photos by Alan Fiala, except as noted otherwise.



Joe Hahn, local host, signals the start of the meeting.



E. Myles Standish, Jr., recipient of the 2001 Dirk Brouwer Award, and his wife. Jeannine.



Terry Alfriend spoke on aspects of flying satellites in formation.



The 2001 Annual Meeting

The 2001 meeting, held at the Lunar and Planetary Institute in Houston on April 22-25, was organized by Hal Levison (Program Chair) and Joe Hahn (Local Host). The facilities were excellent, the support staff was very helpful, and the weather was mild with a little rain (and some exciting Houston lightening). The meeting program, prepared well in advance by Hal Levison and posted on our web site through Doug Mink's effort, was printed in a handsome booklet with an arresting image of Saturn's rings as cover art.

The 2001 Brouwer Award was formally presented to E. Myles Standish, Jr., for the development of the JPL planetary ephemerides. His invited lecture at the meeting was an historical talk on one of Myles's favorite topics, "Galileo's Observations of Neptune," wherein he reconsidered Galileo's identification(s) of Neptune that appeared in his early sketches of the positions of Jupiter's satellites.

Invited papers at the 2001 meeting were presented on the dynamical stability of Upsilon Andromedae by Pavel Artymowicz, Stockholm; collisionless dark matter halos by Edward Bertschinger, MIT; extrasolar planet candidates by Dave Black, LPI; celestial mechanical effects on Europa's habitability by Rick Greenberg, U. Arizona; dynamics of interplanetary dust by Keith Grogan, Goddard; a dynamical systems approach to the circular restricted three-body problem with applications to lunar transfer orbits and cometary transport by W. S. Koon, Caltech; and planetary rings by Phil Nicholson, Cornell. John Connolly, an engineer with the Exploration office of Johnson Space Center, presented "Leaving



an enthusiastic talk, John Connolly, JSC, (right) entertained guests at the the banquet with a talk entitled "Leaving the Cradle," or, Cradle," after the space exploration beyond the International Space Station. Fritz Benedict, left, discusses it afterwards.

### **DDA Student** Stipend Program

banquet.

For the seventh consecutive year, two student stipends were awarded at the annual DDA meeting. The outstanding recipients were Eric Barnes (LSU),

"Characterizing 3D Doug Hamilton enjoy the banquet. Stellar Orbits with Correlation Integrals," and from Cornell Britt Scharringhausen, whose topic was "Adaptive Optics Observations of Saturn's Inner Moons." They each presented their first papers at our annual meeting.

To increase student participation at DDA meetings, the Division From LSU: Eric Barnes, Student Stipend student stipends of \$400 each. Any full or part-time student presently enrolled in an academic program at a college or university is eligible and encouraged to apply. For next year's April 2002 meeting, submit an abstract of a paper for presentation, along with an advisor's recommendation, to Dr. Jane Russell, NASA's From Cornell University: (From the left) Joe jrussell@lheamail.gsfc.nasa. advisor and invited speaker.

gov.



who spoke on (From the left) Bill van Altena, Bob Greenberg, and



makes available up to two Awardee, and Joel Tohline, his advisor.



GSFC, Code 664, Burns, Division Chair; Britt Scharringhausen, Greenbelt, MD 20771, Student Stipend Awardee; Phil Nicholson, her



Those who keep the Division running: (From the left) Peter Shelus, Treasurer; Hal Levison, Chair; and Marc Murison, Secretary. Not pictured: Dave Merritt, Vice Chair.

the field of dynamical astronomy, including celestial mechanics, astrometry, stellar systems, galactic and extragalactic dynamics. Complete information regarding the Brouwer Award can be found at the DDA web site http://dda.harvard.edu or by contacting the Committee Chair, *Dr. William F. Van Altena*, Dept. of Astronomy, Yale University, PO Box 208101, New Haven, CT 06520-8101, vanalten@astro.yale.edu. Nominations must be received by **31 December 2001.** 

### **Future DDA Meetings**

The next DDA meeting will be held at the Timberline Lodge near Portland, Oregon, **21–24 April 2002**. The local host will be Alan Harris of JPL, and the program committee will consist of Harris, David Merritt (Vice Chair), and Marc Murison (Secretary). The 2003 meeting is scheduled for May 5-8 at Cornell University with Joe Burns as local host. The DDA is considering holding its 2004 meeting abroad, perhaps in Brazil.

### **Officers and Membership**

The officers elected for 2001-2002, Committee members elected for 2001-2003, and continuing Committee members, are *Chair:* Hal Levison (SwRI); *Vice Chair:* David Merritt (Rutgers); *Past Chair:* Joe Burns (Cornell); *Secretary:* Marc Murison (USNO); and *Treasurer:* Pete Shelus (U. Texas at Austin). Committee members are: *First Year:* Robin Canup (SwRI); Phil Nicholson (Cornell); Tom Statler (Ohio U.); *Second Year:* Jane Morrison (STScI); Judit Ries (U. Texas at Austin); and Steve Unwin (JPL).

The Division has continued to grow, reaching 216 regular members and 39 affiliates for a total membership of 255, up 10% from last year and over 30% from 1998.

We are saddened that three members (James H. Bartlett, Samuel J. Goldstein and Joseph W. Siry) passed away.



Almost the whole DDA meeting.

### Nominate for 2003 Brouwer Award

The Brouwer Award Selection Committee of the DDA invites nominations from any member of the AAS for an award competition. The Brouwer Award was established to r e c o g n i z e o ut s t a n d i n g contributions to

### Wisdom To Receive The 2002 Brouwer

The 2002 Brouwer Award was given to **Jack Wisdom**, Professor of Planetary Science at MIT. The citation reads as follows:

"Jack Wisdom (Massachusetts Institute of Technology) pioneered the application of modern nonlinear dynamics and the theory of Hamiltonian chaos in the field of solar system dynamics. As a graduate student, he was the first to apply the resonance overlap criterion



The Division announced that Jack Wisdom of MIT is the 2002 Dirk Brouwer Award winner

to this field, demonstrating that the band of chaotic, short-lived orbits near a perturbing body results from the overlap of mean motion resonances. He subsequently solved the long-standing problem of the origin of the Kirkwood gaps. After developing an algebraic mapping to permit rapid numerical integration of trajectories near the 3/1 Kirkwood gap, Jack showed that chaotic orbits in this gap undergo intermittent jumps in eccentricity that lead to planet-crossing orbits. This not only provides a means of clearing the gap but also demonstrates a means of delivering meteoritic material to the Earth. The boundary of the numerically determined 3/1 Kirkwood gap, giving the first clear evidence of a physical manifestation of dynamical chaos in our solar system.

"Through continued, careful investigations, Jack has illustrated the ubiquitous role that dynamical chaos plays in the evolution of our solar system. Through Jack's efforts, we now know that the Saturnian moon Hyperion tumbles chaotically, and that every satellite passes through a period of chaotic rotation as it tidally evolves toward synchronous rotation. We also know, from his work with student Jihad Touma, that the obliquity of Mars varies chaotically, a result with profound implications for the climate of that planet. In addition, Jack and his student, William Tittemore, demonstrated that the anomalously high inclination of Miranda resulted from a temporary capture in the 3/1 resonance with Umbriel. Through long-term numerical integrations on a special-purpose computer, Jack and colleague Gerald Sussman shattered the long-held view of the clockwork motion of the planets by revealing the chaotic evolution of Pluto's orbit. They

went on to confirm the chaotic evolution of the outer planets and the full solar system. Most recently, Jack's work with Touma has provided new insights into the complex evolution of the Moon's orbit. Throughout his career, Jack has developed numerous analytical and numerical techniques upon which our community has relied and built. A notable example is the symplectic map for the n-body problem, a technique that now forms the core of nearly every solar system dynamics integration scheme in use today. For his fundamental contributions and leadership in the field, we find Jack Wisdom an outstanding candidate for the Brouwer Award."

Photo by Debra Rueb, LPI.

**DIVISION NEWS** Continued from previous page

# **High Energy Astrophysics**

Paul Hertz, Secretary-Treasurer

### 2001 Rossi Prize to Fabian and Tanaka

Two astronomers who first observed X-ray light being stretched by the crushing force of gravity near supermassive black holes are the winners of the 2001 Bruno Rossi Prize, awarded by the High Energy Astrophysics Division of the American Astronomical

Society. Andrew Fabian of the Institute of Astronomy in Cambridge, England and Yasuo Tanaka of the Institute for Space and Astronautical Science (ISAS) in Kanagawa, Japan used the Advanced Satellite Cosmology and for Astrophysics (ASCA) satellite, to discover broad iron K-lines in active galactic nuclei which demonstrate the effects of the strong gravitational field characteristic of black holes.

Tanaka, Professor Emeritus at the ISAS, is currently a visiting scientist at the Max Planck Institute for Extraterrestrial Physics in Garching, Germany. He is a Past-President of the Astronomical Society of Japan and is a foreign associate member of the Royal Dutch Academy of Sciences, The Royal Astronomical Society and the US National Academy of Sciences. Professor Fabian is a Royal Society Research Professor at the Institute of Astronomy, University of Cambridge.

The Rossi Prize recognizes significant contributions as well as recent and original

work in high-energy astrophysics. It is awarded annually in honor of Bruno Rossi and includes an engraved certificate and a \$1,500 award. Fabian and Tanaka are invited to deliver the Rossi Prize Lecture at the January 2002 meeting of the American Astronomical Society in Washington, DC.

### **HEAD Elections Results**

Three new members of the HEAD Executive Committee were elected in the December 2000 balloting. They are Nancy S. Brickhouse (Center for Astrophysics), Greg Madejski (SLAC), and John Nousek (Penn State).

# Planetary Sciences Ellis Miner, Press Officer

# **DPS Prize Winners for 2001**

We are pleased to announce the following winners of the DPS prizes for the year 2001, to be presented at the New Orleans meeting in

27 November-1 December 2001. Information in addition to that below will be available in press releases closer to the time the awards are to be presented.

### 2001 Kuiper to Hapke

The 2001 Kuiper Prize is awarded to Professor Bruce W. Hapke of the University of Pittsburgh. Professor Hapke's research contributions have provided the foundation for interpreting planetary remote sensing data. Specifically, he developed a comprehensive analytic model for understanding the reflectance of electromagnetic radiation from a particulate medium that includes the effects of regolith particle size, packing density and large scale macroscopic roughness. This model has become widely used by the planetary science community to construct radiometrically corrected spacecraft images and to interpret spectrophotometric reflectance and thermal emittance from particulate media.

Furthermore, he advanced the concept of "space weathering" as a means of explaining the surface chemistry of planetary regoliths. He proposed the widely accepted model in which iron bearing minerals are reduced by the solar wind and by impact vaporization to

metallic iron as the explanation for the low reflectivity of Earth's moon and Mercury and asteroids.

# **Caltech's Michael Brown Wins Urey Prize**

The 2001 Urey Prize is awarded to Prof. Michael E. Brown of the California Institute of Technology. Prof. Brown's wide-ranging interests as an observational astronomer have addressed many problems in the field. He measured the sulfur ion emission from the Io torus and quantified the relationship between Io's volcanoes as a sulfur source and the subsequent evolution of ionic sulfur in the environment of the Jovian magnetosphere. He produced high resolution spectra and images of emission lines in the comets Hale-Bopp and Huyakutake, imaged time variable auroral arcs in



won the Urey Prize for various

Ganymede, Europa and Neried.

discoveries on Io, Titan

U. of Pittsburgh's Bruce Hapke

wins the 2001 Kuiper Prize for

modeling electromagnetic

radiation.



Yasuo Tanaka of the University of Tokyo's Institute for Space and Astronautical Science shares the 2001 Rossi Prize for his work on the gravitational field of black holes.



The Institute of Astronomy's Andrew Fabian used the ASCA satellite to look into the nature of black holes.



atomic oxygen lines on Ganymede, and he mapped the surface and spatially resolved the atmosphere of Titan. He is also the discoverer of sodium and potassium in Europa's atmosphere, water ice on the surface of Neptune's satellite Neried and ammonia ice on the surface of Charon. His many research contributions are widely accepted by the community.

### Brahic Is 2001 Sagan Medalist

The 2001 Sagan Medal for outstanding communication to the general public by an active planetary scientist is

awarded to André Brahic, Professor at the L'Université Paris 7- Denis Diderot, France. For more than 25 years Prof. Brahic has been active in the study of planetary rings, participating in the Voyager mission, and currently is a member of the Imaging Team of the Cassini mission en route to Saturn. In addition to his scientific research. Prof. Brahic has written at least 100 articles for the popular press, has written eight popular books, has made numerous appearances on television, and gives frequent and well attended public lectures. During the Voyager missions he was one of the most sought after personalities to convey the excitement and wonder of that mission to the French-speaking public, but remarkably also among the English-speaking press. His most recent book, Les Enfants du Soleil (The Children of the Sun) is a best-selling science book in the French-speaking world. Prof. Brahic is distinguished in his public communication by his joyous and enthusiastic style, but also by his rigorous attention to scientific accuracy. Thus it is entirely appropriate that he is sometimes referred to as "the Carl Sagan of France."



# Judy Karpen, Chair

### 2001 Hale Prize to Title

The AAS Solar Physics has awarded its 2001 Hale Prize to **Alan M. Title** of the Stanford Lockheed Institute for Space Research, and of Lockheed Martin Missiles & Space, Inc., in Palo Alto, CA. In awarding the prize, Title was cited by the selection committee "for his exceptional leadership in developing multiple, innovative, high resolution telescopes and interpreting their data to dramatically advance our understanding of the sun and for his generous public service on behalf of the solar and solar-terrestrial communities." He is described by colleagues as "the world leader in the scientific effort to resolve the dynamical structure of the Sun's photospheric magnetic activity."



Sagan Medalist André Brahic of the L'Université Paris 7 - Denis Diderot is already known as the "Carl Sagan of France" for his many popular astronomy and science books and television appearances.



Lockheed Martin's Alan M. Title is the 2001 Hale Prize Winner for his investigations into the Sun's photosphere.

Alan Title earned a PhD in physics at the California Institute of Technology in 1966 after which he was a National Academy of Sciences Research Fellow at the Smithsonian Astrophysical Observatory. From 1967 to 1971 he was principal scientist for the ATM H-alpha experiment at based at Harvard University. He has worked at Lockheed Missiles & Space Inc. since 1971. He is currently a Senior Member of the Research Laboratory there and Senior Staff Consulting Scientist in the Solar and Astrophysics Department. He is also co-director of the

Stanford Lockheed Institute for Astrophysics and Space Research.

Title has been the recipient of a number of major awards among which are two major NASA Achievement Awards in 1974, two IR-100 Awards in 1976 and 1977 for his filter designs, and the NASA Public Service Medal in 2000. He holds several patents for filters and a polarizer. He won the Robert E. Gross Award for Scientist of the Year at Lockheed in 1983, the Space Science Medal of the AIAA in 1990 and was the James Arthur Lecturer at Harvard in 1991.

# **Historical Astronomy**

Barbara Welther, Chair, bwelther@cfa.harvard.edu



### NEW Links on the HAD Website!

Since the AAS-HAD meeting in San Diego, the new officers and committee members have been busy with several HAD projects. One of the most pressing matters has been to develop the HAD web site. Our home page now features the HAD logo of the old astronomer and

lists several new links to informative pages.

One of the most valuable links is entitled, "Recent Publications Relating to the History of Astronomy," features the bibliographies that **Ruth Freitag** has been preparing for some years. Up until now they were available only as a supplement to the *HAD News*. Thanks to **Ron Brashear**, our new Secretary-Treasurer and Web Master, the online version comes in two searchable formats: HTML and PDF. As of this writing, only the bibliography for February 2001 is on our web site. In time, however, we plan to make the past bibliographies available there, as well as the future ones as Freitag prepares them.

Another valuable link is our "Index of AAS Obituaries." With the help of Lynn Scholz, the Associate Editor of the AAS *Newsletter*, we now have an alphabetical list of deceased members whose obituaries have been published in the *Bulletin of the AAS*. Even better, some of the names are hyper-linked to an online copy of the obituary on the NASA Astrophysics Data

#### DIVISION NEWS — HISTORICAL ASTRONOMY Continued from page 17

System web site. In the coming months we plan to link the rest of the names to their respective ADS pages as they become available. **Brenda Corbin**, one of our new Committee Members, has pointed out that the BAAS obituaries are also listed in the US Naval Observatory's online catalog, *URANIA*.

On our web pages for the Leroy E. Doggett Prize, we've reprinted an introductory paragraph that **Katherine Bracher** wrote for the *AAS Centennial Book*, edited by **David DeVorkin** in 1999. We've also included the rules for the prize that **Woody Sullivan** evolved in the mid-1990s. The first two recipients were Curtis Wilson (1998) and **Owen Gingerich** (2000). **Virginia Trimble**, the current Chair of the Doggett Prize Committee, is accepting nominations through 15 June for the third recipient. In time, we plan to develop a special link for each recipient, featuring a picture, biographical sketch, and the special wording on their certificate.

On other web pages we've reprinted some of **Kate Bracher**'s tables that were published in the *AAS Centennial Book*. These include information on past officers and past meetings. On the latter table there is a section entitled "Special Events." We encourage HAD members who attended the early meetings from 1981 through 1993 to send us a short sentence of their recollections of any special events in the first dozen years so we can fill in the blanks in that table.

*Obituaries:* **Tom Williams**, the new Chair of the Obituary Committee (OC), is forging ahead with recruiting writers for our ongoing project of publishing biographical sketches of deceased AAS members. If our writers come through as well as they did last year, we should have another sizeable section of text and photographs in the December 2001 issue of *BAAS*.

Joe Tenn, who has served as the HAD representative on the AAS Obituary Committee, has graciously accepted another two-year term. He's been a great asset to the project in researching, writing, and editing some of the obituaries. Don Osterbrock, Frank Edmondson and Brian Marsden have also been very supportive to the AAS OC in suggesting writers and providing photographs for some of the obituaries.

*Future Meetings*: On another front, **Tom Hockey**, our previous Secretary-Treasurer, now a new Committee Member, has explored the possibility of HAD's meeting with the AAS Division for Planetary Sciences. It seems as if the year 2005, when HAD will be celebrating its 25<sup>th</sup> anniversary, would be a good year to join DPS for its meeting in Cambridge, England. Imagine seeing Newton's manuscripts and other historical treasures. Think about visiting the Royal Astronomical Society where American Astronomers like Henry Draper gave papers. Consider an archaeo-astronomy tour to such sites as Avebury, Callanish, and Newgrange... Start saving your travel money. Your HAD officers are all enthusiastic about this possibility.

*Next Meeting: Washington, DC*: Meanwhile, we're busily planning our meeting in DC next January. We have lined up a special reception with the AIP Center for the History of Physics for Sunday afternoon and an invited session on the "History of Ideas on Extraterrestrial Life," for Monday morning. Contributed papers, both oral and poster, will also be welcomed. And we may have a special lecture by our new Doggett Prize winner. I hope to see many of you there for this special meeting in our Nation's Capitol.

# **NEWS FROM NSF**

Wayne van Citters and Eileen Friel, NSF AST

### **NEW: Astronomy & Astrophysics Postdoctoral Fellowships**

The Division of Astronomical Sciences announced a new program of postdoctoral fellowships last year with the creation of NSF Astronomy and Astrophysics Postdoctoral Fellowships. These fellowships provide an opportunity for highly qualified young investigators within three years of obtaining their PhD to carry out an integrated program of independent research and education for a period of up to three years at the institution or national facility of their choice. The program is intended to recognize young investigators of significant potential, and provide them with experience in research and education that will establish them in positions of distinction and leadership in the community.

We are happy to announce the first NSF Astronomy and Astrophysics Postdoctoral Fellows:

- **Kimberly Coble**, University of Chicago, "An Integrated Program of Cosmological Research and Education;"
- Kristy Dyer, NRAO, Socorro, "Nonthermal Emission in Supernova Remnants;"
- Brenda Frye, Princeton University, "Measuring Cluster Masses;"
- Eric Hooper, University of Texas, Austin, "A Census of Accretion Power in the Universe;"
- Denise Hurley-Keller, Case Western Reserve University, "Dwarf Galaxy Satellite Systems Beyond the Local Group;"
- Kelsey Johnson, University of Wisconsin and NRAO, Socorro, "The Formation and Early Evolution of Massive Star Clusters;"
- Brian Keating, California Institute of Technology, "Polarimetry of the Cosmic Microwave Background Radiation;"
- Dara Norman, Cerro Tololo Inter-American Observatory, "A Search for Evidence of Magnification Bias in the Deep Lens Survey;"
- Don Smith, University of Michigan, "Fast Transient Observations of Optical Flares from Gamma Ray Bursts;" and
- Josh Winn, Harvard University, "Gravitational Lensing, Interferometry, and Education."

### **DEADLINES: NSF FY2002 Grants:**

- 26 July 2001: CAREER (MPS) Faculty Early Career Development Program
- 31 August 2001: ATI Advanced Technologies and Instrumentation
- 15 September 2001: REU Sites - Research Experiences for Undergraduates (REU) Sites REU Supplements Anytime
- 8 Oct 2001: NSF Astronomy and Astrophysics Postdoctoral Fellowship Program (AAPF)
- 15 Nov 2001: Astronomy & Astrophysics Research Grants in the following areas: EXC - Extragalactic Astronomy and Cosmology
  - EXC Extragalactic Astronomy and Cosi
  - GAL Galactic Astronomy
  - PLA Planetary Astronomy
  - RUI Research at Undergraduate Institutions
  - SAA Stellar Astronomy and Astrophysics
- 15 January 2002:

Under-represented Minorities Programs RPG - Research Planning Grants CAA - Career Advancement Awards

# **ASP NEWS**

Jay White, Executive Director, jwhite@aspsky.org

### **2001 ASP Prizes Announced**

### **Bethe is Bruce Medalist**

The ASP's highest honor presented for a lifetime of outstanding research in astronomy, the *Catherine Wolfe Bruce Gold Medal*, is awarded to **Hans Bethe** of Cornell University in Ithaca, NY. Dr. Bethe is recognized for his contributions to our understanding of how stars produce energy. With other physicists in the 1930s, Bethe calculated the detailed nuclear fusion reactions that power stars like the Sun; he explained how hydrogen atoms fuse to form helium atoms, giving off energy in the process; and explained how more massive stars generate energy through the carbon cycle, which creates nitrogen and oxygen. For these and other contributions, Bethe was awarded the 1967 Nobel Prize for Physics. Nearing the age of 95, Bethe remains active in research.

### **Preston Wins Klumpke-Roberts**

The *Dorothea Klumpke-Roberts Award* for outstanding contributions to the public understanding and appreciation of astronomy is awarded to **Sandi Preston**, of the McDonald Observatory, University of Texas, Austin. Preston is responsible for all the McDonald Observatory public information programs, including the *StarDate* syndicated radio program reaching a combined weekly audience of 10 million listeners and *StarDate* magazine with over 10,000 subscribers and including the McDonald Observatory Visitor's Center that serves over 130,000 people a year.

### **Michael Pahre To Receive Trumpler**

The *Robert J. Trumpler Award* for a recent PhD recipient whose doctoral research is considered unusually important to astronomy goes to **Michael A. Pahre** who earned his PhD at the California Institute of Technology. Pahre studied more than 300 galaxies in optical and infrared wavelengths and found that the ages, velocities, and distributions of their stars varied according to the mass of the host galaxies. He showed that stars in elliptical galaxies formed when the universe was only 10% of its current age. His data also showed an intriguing hint that less massive elliptical galaxies evolve slightly faster than more massive ones, implying that the low-mass galaxies formed later, which is in accordance with theoretical predictions. Pahre currently works at the Harvard-Smithsonian Center for Astrophysics.

### **Muhlmann Prize for Instrumentation to Taylor**

The *Maria and Eric Muhlmann Award* honoring scientists who have obtained important research results based upon their development of forefront instruments and techniques is presented to **Keith Taylor** of the California Institute of Technology for producing the first Fabry-Perot imaging spectrograph, which allows astronomers to investigate the velocity and distribution of elements in objects such as nebulae and nearby galaxies. He also played a key role in the development of the Low Dispersion Survey Spectrograph, which allows astronomers to take simultaneous spectra of galaxies in clusters. Perhaps Taylor's most ambitious project to date has been the development of the Two-Degree Field (2dF) facility, which combines a highly complex wide-field corrector for the Anglo-Australian Telescope with 400 robotically positioned optical fibers that feed a pair of multi-object spectrometers.

### **Other Awards Announced**

The Thomas J. Brennan Award for exceptional achievement related to the teaching of astronomy at the high school level, is presented to James G. Hill, Founder and Director of the French Camp Academy's Rainwater Observatory and Planetarium in French Camp, Mississippi. The Amateur Achievement Award goes to Syuichi Nakano, of Sumoto, Japan for computing comet orbits for almost a quarter of a century. He is a skilled computer programmer who has developed unique methods of computing the orbits required for detailed study of possible comets and asteroids. He has written numerous books and journal articles and makes frequent television appearances in Japan. The Las Cumbres Amateur Outreach Award is presented to Joseph R. Caruso, a technician at the Oak Ridge Observatory in Harvard, Massachusetts. The award honors outstanding outreach by an amateur astronomer to children and the public. Beyond his employment duties, Joe has made extraordinary and sustained contributions to astronomy education and outreach in the greater Boston area for more than 25 years.

More information about the ASP's 2001 award winners can be found in the May/June 2001 issue of *Mercury*, the bimonthly magazine of the Society. Photos of the recipients are posted at http://www.aspsky.org/membership/01winners.html. The awards will be presented at the Annual ASP meeting in St. Paul, Minnesota, on Saturday 14 July 2001.

### Jay White Leaving for Academe

The Board of Directors of the Astronomical Society of the Pacific (ASP) regrets to announce the departure of its executive director, Dr. James (Jay) C. White II, who has accepted the position of chair of the Physics Department at Rhodes College in Memphis, Tennessee, effective 1 August 2001. A member of the AAS and a Fellow of the IAU and RAS, White made the ASP more vital and vigorous by his efforts.

White began his formal association with the ASP seven years ago with his first article in *Mercury* magazine. Following that, he was asked by the *Mercury* editor to create a new, regular column called "Guest Observer" for the magazine. For more than two years White authored the column, which exists now as "Armchair Astrophysics." In late 1997 he was named editor of *Mercury* magazine, and he oversaw its development and refinement for two years from his position as associate professor of astronomy at Middle Tennessee State University. While in San Francisco on a leave of absence from the University, White was named executive director of the ASP in 2000.

The ASP Board invites applications for the position of executive director to start as early as 1 August 2001. A successful candidate should have at least three years experience in a nonprofit or business management position. S/he is also expected to have at least a BS (but preferably MS or PhD) degree in astronomy or another physical science, but candidates without that degree and with relevant experience plus a knowledge of, and passion for, astronomy and



ASP Executive Director Jay White will leave to chair the Physics Department at Rhodes College in Memphis, TN.

ASP NEWS Continued from page 19

science education will be seriously considered. Consideration of applicants will begin immediately, but all applications received by **15 June 2001** will be evaluated. Full information about the position can be found at http://www.aspsky.org/news/execdirect.html.

### Review Articles in the PASP

For some years, it has been the policy that review articles in the *Publications of the Astronomical Society of the Pacific* are submitted only on the invitation of the Editors. Anne Cowley and David Hartwick, Co-Editors, have decided to eliminate this policy and permit their submission without specific invitation with the hope that high quality articles on a wide range of topics will be submitted.

In order to prevent authors from spending a lot of time preparing a review, only to hear that a very similar one is already in press, the Editors invite authors to send in an outline and a date by which they plan to submit a review article. All submitted review articles will be sent to referees in the same way that regular research articles are handled. It is expected that the rapid publication time for which the *PASP* is known will also apply to review articles. See http://pasp.phys.uvic.ca or write to the editorial offices (pasp@asu.edu or pasp@uvic.ca) for more information.

### Filippenko New ASP President

The ASP Board announces that Dr. **Alex Filippenko**, of the University of California, Berkeley, is the new president of the ASP, effective 10 March 2001. Filippenko replaces Dr. Frank Bash, of the University of Texas at Austin, whose successful two-year term marked a time of significant changes in the ASP.

# COMMITTEES

# Status of Women in Astronomy

C. Meg Urry, Chair, cmu@stsci.edu

### **Pasadena Special Session**

The Special Session of the Committee on the Status of Women in Astronomy, on Monday, 4 June, from 2:00-3:30p, features Dr. **Debra Rolison**, a chemist at the Naval Research Laboratory. Her talk, entitled "Isn't a Millennium of Affirmative Action for White Men Sufficient?," addresses the situation of women in chemistry (which parallels that of women in astronomy). Dr. Rolison will discuss possible remedies for the lack of women faculty at U.S. institutions, including the provocative possibility of filing suit under Title IX. There will be ample time for discussion with the audience.

### June STATUS "Hits The Streets"

*STATUS*, the newsletter of the Committee on the Status of Women in Astronomy, will be coming out with its sixth issue edited by Meg Urry and Lisa Frattare (STScI). Look for the *STATUS* in your mailboxes or at the June AAS meeting in Pasadena. If you are not already receiving *STATUS* at your home institution, e-mail drenner@aas.org to receive a copy. Past issues are available on-line at http://www.aas.org/cswa.

# NEWS FROM CANADA CASCA Awards for 2001

*Marshall L. McCall, Awards Committee,* mccall@aries.phys.yorku.ca The Canadian Astronomical Society/Societé Canadienne d'Astronomie (CASCA) is pleased to announced the following awards for 2001:

### Peter Brown Wins Plaskett Medal

The J. S. Plaskett Medal for an outstanding doctoral thesis in astronomy or astrophysics by a Canadian student in the past two years is awarded to **Peter Brown** of the University of Western Ontario. Brown's thesis, submitted to the University of Western Ontario, was titled "Evolution of Two Periodic Meteoroid Streams: The Perseids and Leonids." The Committee recognized the thesis as a comprehensive blend of observational and theoretical studies which may well last for a generation as the definitive work on the Perseid and Leonid meteor showers.

Dr. Brown holds a Canada Research Chair in the Department of Physics and Astronomy at the University of Western Ontario, but is presently on leave as a postdoctoral fellow at Los Alamos National Laboratories.

### Princeton's James Gunn is Petrie Lecturer

**James Gunn** of Princeton University has been awarded the *R. M. Petrie Prize Lectureship*. The Petrie Lecture is an invited discourse by an outstanding astrophysicist which is held at Annual Meetings of the Society in alternate years. Professor Gunn is being acknowledged for his long record of accomplishments in astrophysics, culminating most recently with the Sloan Digital Sky Survey.

### Tarter is The Helen Sawyer Hogg Lecturer

Jointly with the Royal Astronomical Society of Canada, CASCA has awarded the *Helen Sawyer Hogg Lectureship* to **Jill Tarter** of the SETI Institute. This public lecture is an annual event honoring sustained and diverse contributions to public appreciation of the universe. Dr. Tarter is being recognized for a lifetime of effort devoted to the search for extraterrestrial life and for her concomitant dedication to public education.

### The June 2001 STATUS Table of Contents include:

 "Evaluation of the Status of Women" by Andrea Dupree

- "The MIT Conference, Revisited" by Meg Urry
- "The Charge of The Association for Women in Science (AWIS)" by Catherine Jay Didion and Kelly Meeker
- "What You Don't Know Can Hurt You: Non-logical Dimensions to Being a Woman Scientist" by Kristy Dyer
- "Perspective from the Biological Sciences" by Diane Hoffman
- "Women and the Work/Family Dilemma, A Book Review" by Ann Wehrle.

### **AAS Small Research Grant Success Story**

After receiving an AAS Small Research Grant, **Dr. Yaroslav Romanyuk**, a senior scientist of the Ukraine's Main Astronomical Observatory, was featured in a local Kiev newspaper. He received \$5,000 from the Small Research Grant program to renovate the 50-inch telescope of the Crimean Astrophysical Observatory. By stretching their funding to the limit, the observatory staff managed to aluminize the mirror, purchase a GPS clock system and make other upgrades to the telescope including a CCD for auto-guiding.

Other details of the project can be found in the newspaper article at the right. Note that the American Astronomical Society is prominently featured in the article.

Romanyuk's Small Research Grant was funded from the Sergei and Cecilia Payne Gaposchkin memorial fund, administered by the AAS.



RESEARCH GRANT AT THE CRIMEAN ASTRONOMICAL OBSERVATORY (Left)Colleagues V. Chalenko (left) and V. Khalack in front of the 50-inch telescope building, Crimean Astrophysical Observatory.

(Right) Colleague O. Svyatogorov adjusts the high speed two-channel



#### HONORED ELSEWHERE Continued from page 11.

# Guggenheim Fellowships to AAS Members

In 2000, John Simon Guggenheim Memorial Foundation Fellowships were won by AAS Members **Alexei V. Filippenko**, professor of astronomy, University of California, Berkeley for research entitled, "The expansion of the universe" and by **Rainer Weiss**, professor of physics, Massachusetts Institute of Technology for "Gravitational waves of astrophysical origin."

In 2001, the Foundation Fellowship went to AAS Member **Paul Schechter**, William A. M. Burden Professor of Astrophysics, Massachusetts Institute of Technology for research entitled, "Studies in the microlensing of quasar light curves."

The John Simon Guggenheim Memorial Foundation provides fellowships for advanced professionals in all fields (natural sciences, social sciences, humanities, creative arts) except the performing arts. Applications for the 2002 Fellowship competitions will be available in July 2001 at http://www.gf.org. There are two separate competitions for citizens or permanent residents of 1) the US and Canada (application deadline **1 October** annually) and 2) Latin American and the Caribbean (deadline **1 December**).

### First Astronomer To Win U. Maryland Teaching Award

**Matthew Bobrowsky**, an adjunct professor of astronomy at the University of Maryland University College has won the Board of Regents Faculty Award for teaching excellence. Only three teaching awards, of which this is one, are given annually to the 7,000 faculty members in the University System of Maryland. Bobrowsky, an astrophysicist, also works at the Challenger Center for Space Education in Alexandria, VA.



Сьогодні астрологія цікавиті лише окрему категорію лю-Більшість із нас не дей. сприймають це явище як науку і користуються деякими познавців небесних радами світил час від часу, та й переважно на побутовому рівні. Гороскопи, астрологічні прогнози чуємо й читаємо майже Шодня. За модним захопленням забули про давню науку астрономію, яку поважали свого часу навіть королі.

В Україні є декілька астрономічних обсерваторій, де спостереження за космічними об'єктами проводяться за допомогою приладів, виготовлених понад десять років тому. Телескопи, на яких встановлено прилади, - набагато старіші, вони ровесники минулого століття. Щоправда, справжніх науковців це не лякає. Група вчених — інженерів Головної астрономічної обсерваторії Національної академії наук України (м.Київ) та Кримської астрофізичної обсерваторії на чолі з Ярославом Романюком повернули до життя телескоп діаметром 50 дюймів виготовлений 1908 року німецькою фірмою "Карл Цейс". Завдяки <u>Американському</u> астрономічному товариству було куплено необхідні матеріали відновлено оптичні поверхні робочих дзеркал телескопа. Це дало змогу спроектувати систему для фіксації точного часу при спостереженнях. Після таких заходів стало можливим підключення 50-дюймового телескопа до Міжнародної синхронної мережі оптичних телескопів. Ця система створюється зусиллями Лабораторії швидкоплинних процесів у зорях Головної астрономічної обсерваторії НАН України під керівництвом Б.Ю. Жиляєва.

Принцип дії цієї системи полягає в тому, що всі телескопи розміщені в близьких часових поясах, можуть бути використані для синхронних спостережень одного постійного об'єкта, що дасть змогу реєструвати маломасштабні спалахи та інші явища в зорях.

Незважаючи на економічні труднощі, українські астрономи розраховують на підтримку Міністерства освіти і науки України та міжнародних організацій.

Галина РОМАНОВА.

# **INTERNATIONAL NEWS** Kudos to Japan: Ten Years of Aid To Astronomy in Developing Countries

Hans J. Haubold, United Nations Office for Outer Space Affairs, haubold@kph.tuwien.ac.at

The cooperation between Japan and the United Nations in promoting space science programs in developing countries is marking its tenth year in 2001.

Building on the successes of the past ten years, the Government of Japan, in cooperation with the Vienna-based United Nations Office for Outer Space Affairs, is continuing the establishment of planetaria and astronomical telescope facilities at universities in developing nations. Japan's initiative is facilitated through Japan's Cultural Grant Aid and General Grant Aid Programs. Cooperation between leading astronomers from the National Astronomical Observatory of Japan, Tokyo, with their peers in developing countries has been a main driving force for establishing planetaria and astronomical telescope facilities in developing nations around the world.

Japan has donated planetaria to Uzbekistan (2000), India (1999), Sri Lanka (1998), Uruguay (1994), and Argentina (1993). Currently negotiations are underway between the Governments of Costa Rica and Japan to establish a planetarium at the Universidad de Costa Rica in San Jose.

Japan has provided telescopes and supplementary equipment to the Philippines (2000), Paraguay (1999), and Sri Lanka (1995). The Government of Chile is currently negotiating with the Government of Japan for the establishment of an astronomical telescope facility at the Cerro Calan Astronomical Observatory at the University of Chile.

These developments follow up on recommendations made at the series of basic space science workshops organized annually since 1991 under the United Nations Program on Space Applications, implemented by the Office for Outer Space Affairs in cooperation with the European Space Agency (ESA) and other international space related organizations.

Author's note: The organizers of the UN/ESA Workshops are particularly grateful to Prof. M. Kitamura, National Astronomical Observatory, Tokyo, Japan, for his untiring and unconditional cooperation in the past decade.

# "Show me the..."...Area Codes!

The AAS does not make global updates of area codes. When we are notified that a specific area code/exchange combination (six digits) is changing in its entirety, then — and *only* then — will we update records as a group. If your area code has changed recently, or you know that it will be changing before 31 December, please check your listing in the online *Directory* and, if a change is required, send updated information to address@aas.org before **3 August 2001** to get the correction into the 2002 Membership Directory.

# ANNOUNCEMENTS

### **Arecibo Observing Proposals**

Every year, NAIC invites proposals for use of the 305-m diameter Arecibo radio telescope with the *annual* deadlines: **Deadline Observing Period** 

Deadline	Observing Period	
l Oct	Following Feb - Sep	
l Feb	Jun - Jan	
l Jun	Oct - May	

Details of the proposal submission procedure can be found on the NAIC Web Page at http://www.naic.edu/aomenu.htm, along with other user related information.

Receivers at 327, 430 and 610 MHz, L-, S- and C-band are presently available for observations, as are pulsar, spectral-line and continuum backends. The latest information on the performance of receivers, plus backend and software availability, is also to be found on the NAIC Web Pages.

A VLBA4 recorder for Very Long Baseline Interferometry (VLBI) was recently delivered to the Observatory and is presently being commissioned. Proposals to include Arecibo in VLBA, EVN or Global Network VLBI observations need to be submitted only to the appropriate networks, but a special justification for the inclusion of Arecibo should be made in the proposal.

### **NSO Observing Proposals**

The current deadline for submitting observing proposals to the National Solar Observatory is **15 August 2001** for the fourth quarter of 2001. Forms and information are available from the NSO Telescope Allocation Committee at PO Box 62, Sunspot, NM 88349 for Sacramento Peak (SP) facilities (sp@sunspot.noao.edu) or PO Box 26732, Tucson, AZ 85726 for Kitt Peak (KP) facilities (nso@noao.edu). A TeX or PostScript template and instruction sheet can be emailed at your request; obtained by anonymous ftp from ftp.sunspot.noao.edu (cd observing templates) or ftp.noao.edu (cd nso/nsoforms); or downloaded from the WWW at http://www.nso.noao.edu/. A Windows-based observing-request form is also available at the WWW site. Users' Manuals are available at http://www.sunspot.noao.edu/telescopes.html for the SP facilities and http://www.nso.noao.edu/nsokp/nsokp.html for the KP facilities. Proposers to SP may inquire whether the Adaptive Optics system is available for their use. Observing time at National Observatories is provided by the National Science Foundation as support to the astronomical community.

### **Increased NRAO User Support Announced**

The following changes in National Radio Astronomy Observatory policies for page charge and travel support took effect 1 April 2001:

*Page Charges*: When requested, for papers reporting original observations made with any NRAO instrument(s), NRAO will pay 100% of the page charges for all authors at a US scientific or educational institution. This is an increase from prior support of 50%. In addition, NRAO will, in some cases, provide page charge support for papers based on the Observatory's archival data. See http://www.nrao.edu/library/page\_charges.shtml for full details, requirements, and procedures.

*Travel Support for NRAO Observing Runs and Data Reduction:* For each observing program scheduled on an NRAO telescope, reimbursement may be requested for one of the U.S. investigators to travel to the NRAO to observe, and for one of the US investigators to travel to the NRAO to reduce data. Reimbursement may be requested for a second US investigator to either observe or reduce data provided the second investigator is a student, graduate or undergraduate. In addition, NRAO will, in some cases, provide travel support to the Observatory for research on archival data. The reimbursement will be for the actual cost of economy airfare, up to a limit of \$1000. See http://www.nrao.edu/administration/directors\_office for full details, restrictions, and procedures.

*Foreign Telescope Travel Fund*: The funds available to support travel by US astronomers to observe using unique foreign-owned radio telescopes have been increased. Reimbursement may be requested up to \$1000 of the cost of economy airfare for such trips. For full details, restrictions and procedures, see http://www.nrao.edu/administration/directors\_office.

### 2002-2003 Fulbright Lecturing & Research Grants

Applications for the US Fulbright Scholar Program are due **1 August** for lecturing and research grants in academic year 2002-2003. Opportunities for lecturing or advanced research in more than 140 countries are available to US faculty and professionals outside academe. US citizenship and the PhD or comparable professional qualifications are required. For lecturing awards, university or college teaching experience is expected but foreign language skills are usually not required. See http://www.cies.org for applications and complete information.

The Fulbright Program is sponsored by the United States Department of State, Bureau of Educational and Cultural Affairs. Under a cooperative agreement with the Bureau, the Council for International Exchange of Scholars (CIES) assists in the administration of the Fulbright Scholar Program for faculty and professionals.

### Theodore Dunham, Jr. Grants in Astronomy

The Fund for Astrophysical Research invites applications for the award of small research grants in astronomy. Applications must be received by **8 October 2001**. Notification of awards will be made and funds will be disbursed in December 2001. For detailed guidelines and application procedures, visit http://www.fdncenter.org/grantmaker/fundastro.

### **First Release SOFA Software Libraries**

The International Astronomical Union's SOFA (Standards Of Fundamental Astronomy) initiative seeks to promulgate an authoritative set of fundamental-astronomy constants and algorithms. The work is carried out by a panel called the SOFA Review Board, the membership of which was agreed just prior to the 1997 General Assembly.

The Board is pleased to announce that a first release of software is now available. The SOFA software libraries are a collection of sub-programs, in source-code form, that implement official IAU algorithms for fundamental-astronomy computations. The sub-programs at present comprise 27 "astronomy" routines supported by 52 "vector/matrix" routines, all written in Fortran. In future releases, the astronomy library will expand, and implementations in other languages will be introduced. For further details, see the SOFA Center's website at http://www.iau-sofa.rl.ac.uk/.

#### **WASHINGTON NEWS** Continued from page 24

As the committee performs its work, the AAS will provide updates and information

AAS will provide updates and information by email and on its Blue Ribbon Panel web page, http://www.aas.org/policy/COMRAA.html.

### AAS Co-Sponsors Hill Event

On 9 May, the AAS in cooperation with the American Chemical Society and other



scientific and engineering societies co-sponsored a reception and hands-on science demonstration as part of Global Science and Technology Week. Bill Nye the Science Guy hosted the event and spoke on the importance of science education. Guests had an opportunity to engage in demonstrations and experiments. Senator **Jim Jeffords** (R-VT ) and Representatives **Vernon Ehlers** (R-MI) and **Rush Holt** (D-NJ) were on hand to describe their efforts in support of science education. The AAS participates in events of this type to interact directly with congressional staff and members as well as highlight the importance of science and science education in the public arena.

### Latest Letter from the Origins Sub-Committee

Alan Dressler, Chair

The Origins Subcommittee (OS) met on 6–7 March in Pasadena, CA and reviewed progress on the Space Infrared Telescope Facility, the Space Interferometry Mission (SIM), the Next Generation Space Telescope (NGST), Starlight, and the Stratospheric Observatory for Infrared Astronomy. Based on what it heard and subsequent discussions, the OS recommended in its letter to Origins Theme Director Anne Kinney that the SIM program fully demonstrate picometer metrology before proceeding towards the Implementation Phase. The OS also voiced its support for the proposed scope of NGST and strongly urged that the mid-IR camera be kept in the project at this time. For details of the recommendations, see the full text of the OS report letter at http://spacescience.nasa.gov/adv/letters.htm.

### Huairou Full Disk H-alpha Data Online

From SolarNews Vol 2001, No. 9

Huairou full disk H-alpha data from the Observing Station of Beijing Astronomical Observatory are now available online at http://sun.bao.ac.cn/observation/datadir.html. Huairou's solar observations normally cover the period between 23:00UT and 09:00UT. Data are processed and available before 00:00UT the next day. Contact Ms. Ganghua Lin of Huairou Solar Observing Station (lgh@sun10.bao.ac.cn) if you experience any problems with the data.

### **Connecting Quarks with the Cosmos: Phase I Report**

The NRC's Committee on the Physics of the Universe (CPU) was charged by DOE, NASA, and NSF with identifying science opportunities at the intersection of physics and astronomy and recommending strategies for realizing these science opportunities. The NRC has recently issued the Phase I CPU report, "Connecting Quarks with the Cosmos: 11 Science Questions for the New Century." The report is available on-line in its entirety at http://www.nas.edu/bpa/reports/cpu/index.html.

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# WASHINGTON NEWS

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### Blue Ribbon Panel Selected

The Bush Administration, both in its Budget Blueprint released in early March and the actual Presidential Budget, released 9 April, called for the ★formation of a "Blue Ribbon Panel" to consider management issues related to federally-funded research in astronomy and astrophysics. Initial information about this administration measure was

detailed in AAS Informational Email 2001-01 (http://www.aas.org/policy/AI2001-01.html).

The panel will carry out its work under the auspices of the National Academy as a committee of the Board on Physics and Astronomy. Its official title is the Committee on Organization and Management of Research in Astronomy and Astrophysics, or COMRAA.

The Committee now has a web page available, which, in addition to the information provided below, allows comments to be submitted to the committee for their consideration. These comments may currently also include comments on the panel membership (http://www.nationalacademies.org/bpa/projects/brp/).

The current membership list is provisional. Final formal appointment will occur after completion of a conflict-of-interest review and posting of the provisional slate for public comment

(20 days) as required under Section 15 of the Federal Advisory Committee Act.

The membership of the committee is:

Norman R. Augustine, Lockheed Martin Corp. (retired) Lewis M. Branscomb, Harvard University D. Allan Bromley, Yale University Claude R. Canizares, MIT Sandra M. Faber, UC Santa Cruz Robert D. Gehrz, University of Minnesota **Philip R. Goode**, New Jersey Institute of Technology Burton Richter, Stanford University Anneila I. Sargent, Caltech Frank H. Shu, UC Berkeley Maxine F. Singer, Carnegie Institution of Washington Robert E. Williams, Space Telescope Science Institute

The Committee has also made available a schedule of activities:

Event and Date	Location	Comments
First Meeting 10 May 2001	Telephone Conference	Closed
Second Meeting 13–14 June 2001	NRC, Washington, DC	Opportunity for public comment
<i>Third Meeting</i> 12–13 July 2001	San Francisco, CA	
Fourth Meeting 31 July–1 Aug 2001	NRC, Washington, DC	
<i>Release of Report</i> 1 Sep 2001	NRC, Washington, DC	

The AAS is particularly pleased that three provisional members of the Committee are past or current Presidents of the Society.