

October 2003
Issue 117

Inside

2-3
Letters to
the Editor:
Global Climate
Change
&
IUA Bylaws

4
Final Slate
AAS Elections

6
Summary of the
Women in
Astronomy II
Conference

9
Education News

10
Divison News

13
International
Travel Grant
Application



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AAS NEWSLETTER

A Publication for the members of the American Astronomical Society

President's Column

Caty Pilachowski, catyp@astro.indiana.edu

Two meetings held this summer will have notable and long-term effects on the American astronomical community. The first is the Women in Astronomy II conference, hosted by Caltech in June, and sponsored by the AAS, Caltech, AUI, AURA, Carnegie Observatories, JPL, the Research Corporation, NASA and Dr. Alice Huang of Caltech. This gathering, held a decade after the original Women in Astronomy conference at the Space Telescope Science Institute in 1992, gave us all a chance to evaluate what we've accomplished, and what we have still to complete. The extraordinary news of the meeting is that young women, in the age group 18-23, are a majority of AAS members in that age group, comprising some 56% of all members under the age of 24. This marvelous growth in the number of women in the early career stages is no doubt fostered by the NSF-sponsored REU programs, which have consistently striven to offer equal opportunity to all excellent students.

With increasing age, women comprise an ever decreasing fraction of AAS members. Rachel Ivie of AIP, however, reported that, based on a preliminary analysis of demographic data, women are represented at higher professional ranks at a percentage consistent with the percentage of women who received Ph.D.s in their original cohort (noting that the mean number of years since the Ph.D. for academic full professors is 29!). Women physicists have fared less well, and astronomers can still quote with pride that we are "better off than physics!" But the second surprise was the dramatic increase in the number of women in engineering, now higher than the percentage of women in physics. Some of the reasons for the gains women have made in engineering were described by Dr. Denice Denton, Dean of the School of Engineering at the University of Washington. Her toolkit on hiring practices should be "must reading" for all search committees for faculty and staff hires (Dr. Denton's toolkit is available on the web at <http://www.engr.washington.edu/advance/>).

Encouragingly, the emphasis now is on climate, rather than overt discrimination, and participants

continued on page 5



AAS Meets in Atlanta 4-8 January 2004

The 203rd AAS meeting, 4-8 January 2004, returns to Atlanta and celebrates the 90th anniversary of the first Atlanta meeting in December 1913. It was at that meeting that Henry Norris Russell presented a now famous talk entitled "Relations Between the Spectra and Other Characteristics of the Stars"

The meeting will be held in the Hyatt Regency Atlanta, easily accessible from the Hartsfield International Airport, and located downtown in the heart of the city.

The meeting features Invited Talks, AAS Prize Lectures as well as many exciting special sessions. HAD and HEAD are also on the program with their prize lectures and sessions. Lunchtime events include town meetings by NASA, NSF, JWST, ALMA as well as HAD and HEAD

business meetings. Check the Extra Events section of the online meeting announcement (www.aas.org/meetings/aas203) for the weekend special functions: Introductory Astronomy Workshop, SIRTf Observation Workshop, NSF Astronomy and Astrophysics Postdoctoral Fellows and Astro 101: A Continuing Dialog.

The AAS Job Center will be held as normal. Computers for checking email will be available as well as many ethernet connections for laptops.

This meeting is being hosted by the AAS Executive office with special assistance from Hal McAlister at Georgia State University.

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The *AAS Newsletter* (ISSN 8750-9350) is published in March, June, August, October, and December by the American Astronomical Society, 2000 Florida Avenue, NW, Suite 400, Washington, DC 20009-1231; Tel: 202-328-2010, Fax: 202-234-2560, aas@as.org; www.aas.org.

The \$110.00 annual membership dues for the American Astronomical Society include \$3.00 that is applied toward a subscription to the *AAS Newsletter*. Periodical postage paid at Washington, DC.

POSTMASTER: Send address changes to AAS, 2000 Florida Avenue, NW, Suite 400, Washington, DC 20009-1231.

Items of general interest to be considered for publication in the *AAS Newsletter* should be sent to crystal@as.org. Appropriate pictures are welcomed. For further information about deadlines and submitting articles, see www.aas.org/publications/newsletter.html. Items submitted to the *AAS Newsletter* are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to ela@as.org.

Kevin B. Marvel, AAS Publications Manager
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Crystal M. Tinch, Associate Editor
Jeff Linsky, U. Colorado, Associate Editor, Letters

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 submission.

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

User Support: aastex-help@as.org

Journal Homepages/Manuscript

Submission: *AJ*, *ApJ*, *ApJL*
www.journals.uchicago.edu/ApJ/information.html



Letters to the Editor

CONCERNING GLOBAL CLIMATE CHANGE

The *August Newsletter* brings word that the AAS is considering a “public statement on the issue of global climate change.” I urge strongly that the Society adhere to normal scientific standards in this.

It is essential to avoid being drawn into short-term political disputes, e.g., “Ratify the Kyoto treaty!” That treaty is flawed. For example, it distributes pollution quotas among nations according to population, not according to gross national product. Congress would reject such punishment of the USA. We emit lots of pollution, but we do so in part because we produce and export many goods needed in the Third World. If we astronomers debate and vote our feelings, without understanding economics, we just impair our credibility on science. Members who are partisan should bear in mind that the present Administration may stay awhile.

At Goddard Space Flight Center there are frequent colloquia on climate modelling. I always ask: “Can your model predict the past successfully?” The answer has always been “No.” Like most of us, I don’t work in this field. My impression is that present understanding of climate change doesn’t justify expenditure of trillions to control it. A report by an expert

AGU-AAS committee might help us out on the science aspects. A vote by the membership or lobbying by Council might be exciting but uninformed.

Members who perceive greater certainty and urgency in this should consider switching to this field. We need to discourage the politician’s tendency to say: “Don’t bother me with research; I need to do something.”

*James E. Felten
Greenbelt, MD*

Making a public statement on global climate change would be a very bad move for the AAS. Taking a public position on a highly-controversial political issue only peripherally relevant to astronomy is both beyond the chartered purpose of the Society and potentially harmful to legitimate, vital interests of the Society and its members.

Individual members are free to make whatever statements they wish. However, an official AAS statement on global climate change would not contribute to “the advancement of astronomy and closely related branches of science,” the

continued on next page

Member Deaths Noted

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

Theodor Jacobsen

Dr. Horace W. Babcock

William F. Swann

(February 1, 2000)

Correction

The High Energy Astrophysics Division dues rate for AAS members will be \$10 rather than \$6 as listed in the August Newsletter.

In the same issue (page 12), Phil Bredesen was incorrectly identified as the Governor of Kentucky. Bredesen is the Governor of Tennessee.

Society's purpose as stated in its constitution. The issue of global climate change is a highly-charged political morass. Taking one side or another on this issue will inevitably generate unnecessary hostility that could weaken the Society's voice on other matters.

Other issues definitely are vital to the interests of our members: funding for NSF and NASA; improvements to science education; reduction of light pollution and radio interference to our observatories; and others. These are topics on which it is both appropriate and important for the AAS to speak officially as a society.

As an interest group (and yes, because we consume taxpayer dollars, we are an interest group), we are small by Capitol Hill standards, and our stock of political capital is limited. We should choose our battles wisely. We should not squander precious political capital on a divisive, emotional issue that is not central to the purpose of the AAS or the professional interests of our members.

*David G. Finley
Mark J. Claussen
Socorro, NM*

Thank you for the opportunity to respond to the letters by Felten and Finley & Claussen. Both letters raise important issues regarding the conditions under which it is appropriate for the AAS to take positions on public policy matters. I hope that everyone with strong opinions on this matter will take the time to write.

Let me begin by summarizing the nature of the statement under consideration. We are not weighing in on climate change models themselves, although there is expertise in the Society in at least two pertinent areas, solar/stellar variability and planetary atmospheres. The statement we propose is focused primarily on a single issue: the community standards for scientific consensus. And the consensus among professional climate modellers that climate change is occurring, that human activity contributes to it, and that it could have

profoundly disruptive consequences for human society is indeed overwhelming.

How does such a statement contribute to the public policy debate on global climate change? Fortunately for us, science is recognized by the public to be rigorous. From that perception it is only a short step to expecting scientific evidence to be judged in the same way as evidence presented at a jury trial: if there is no doubt, the experts will be unanimous, and if the experts are not unanimous, there must be doubt. By pointing out that a compelling case does not demand unanimity we are explaining the meaning of scientific consensus to the public. That is the main contribution our statement makes. Promulgating a joint statement with other scientific societies such as the APS and AGU, as Council voted to do, can only increase its impact.

How does such a statement fall within the purview of the AAS? Communicating how scientists weigh evidence is an important aspect of educating the public in the scientific process. It is as central to our outreach mission as the wonders of the Universe itself, which we share with the public, very effectively, every day.

Finally, will such a statement detract from other interests of the Society? Undoubtedly there will be those who disapprove, and perhaps believe that we should pay a price. But there will be others who are favorably impressed, and perhaps feel a kinship with astronomy that they did not feel before. We cannot predict how these effects will balance, so we cannot decide to act, or not to act, on the basis of expected consequences. What we can do, as recipients of substantial public generosity, is fulfill our civic responsibility to speak up on issues to which we can contribute.

*Ellen Zweibel
Madison, WI*

THE IAU IS UNDEMOCRATIC

On the first day of the recent IAU General Assembly in Sydney, a new set of IAU Statutes and Bylaws was put into place by a vote of the national representatives.

Among other things, the new documents provide that all voting at IAU General Assemblies will now be done only by the national representatives; that commissions have a term of only six years before they must be re-justified; and that generally authority is shifted upward from the commissions to the divisions. These new statutes and bylaws had not previously been provided to individual IAU members for comment (although a few commission presidents did notify their members about some of the changes), were not in the packet in Sydney, and have still not been made available on the web or by e-mail. However, some of us did see copies of these documents in Sydney, left in a meeting room by mistake.

Many of us doubt that the changes will be positive for the IAU. The way in which the changes were made, without announcement or opportunity for comment, strike many of us as undemocratic. Of course, this is now water under the bridge. However, there soon will be an AAS election in which representatives to the US National Committee for the IAU (USNC-IAU) will be chosen. Perhaps we in the US need to hold our national committee members to a higher standard of communication than in the past. Right now we don't know what they do and they don't ask us what we want. With the new IAU structure in place, and individual IAU members disenfranchised, that must change.

*George Kaplan, John Bangert, Brenda Corbin, William Hartkopf, James Hilton, Brian Mason, Alice Monet, Dan Pasco, Ted Rafferty, Norbert Zacharias
Washington, D.C.*

Note: Letters to the Editor on current issues of importance to astronomers are welcomed. Letters must be signed and should not exceed 250 words. Send to Jeff Linsky, Associate Editor, Letters, (jlinsky@jila.colorado.edu; 303-492-7838 phone; or 303-492-5235 fax) one week prior to the *AAS Newsletter* deadline. Letters may be edited for clarity/length (authors will be consulted) and will be published at the discretion of the Editors.

Secretary's Corner

Arlo U. Landolt, aassec@as.org

Committee Vacancies Need to be Filled

Vacancies for several AAS committees will be filled by Council at its meeting in Atlanta in January 2004. Current committee members are listed under "Council/Committees" on the AAS homepage, www.aas.org. Committees that have vacancies, followed by the number of vacancies on each (in parenthesis) are:

Russell Lectureship Committee (2)
Heineman Prize Committee (2)
Warner and Pierce Prizes Committee (3)
Annie J. Cannon Prize Committee (1)
Van Biesbroeck Prize Committee (3)
AAS Education Prize Committee (2)
Weber Award Committee (2)

AAS Members may themselves volunteer, or suggest other Members for one of the vacancies. To be most useful to the Committee on Appointments, who may not know everyone, please include the date of Ph.D., as well as a few sentences conveying to the Committee the background and area of expertise of the named individual. The goal is to have both quality and breadth across the AAS committee structure.

Input must be received in the Office of the Secretary no later than 15 December 2003. Submit suggestions to Arlo U. Landolt, AAS Secretary, by email to aassec@rouge.phys.lsu.edu or at the Department of Physics and Astronomy, Louisiana State University, Baton Rouge, LA 70803-4001, Tel: 225-578-1160, Fax: 225-578-7001.

Message to Associate Members

Only (Full) AAS Members have the right to hold office or to chair committees of the Society. Many Associate members who are eligible to upgrade to Full Membership and whose expertise could benefit the Society, cannot serve. Associate members, please consider upgrading, and becoming more involved with Society activities!! There is no increase in dues!! (See a description of the different membership classes in the *Bylaws*, Article I.1, or on the membership application form.) Both of these sources are in the *2003 Directory*. If any of you have questions, please contact me at aassec@rouge.phys.lsu.edu.

2004 Membership Invoices

AAS members will be receiving their 2004 Membership Invoices soon after this issue of the *AAS Newsletter*. Since virtually everyone eventually does pay their dues, **please consider prompt payment** of your dues! **Prompt payment** saves the Society staff considerable effort and time in reminders, which translates into saving money for all of us!!!

Atlanta Meeting Sessions Will Need Chairs

AAS members are invited to volunteer to chair one of the oral paper sessions at the AAS meeting in Atlanta in January 2004. A session chair should be at least a few years beyond the Ph.D., and have had experience, i.e., being the lead author in presenting at least two or three oral papers at AAS meetings. Please watch for the Final Program on the Web, and after it has been posted, review its contents, and then list in order of preference two, three or four oral sessions that you would be willing to chair, in or near your field of expertise. Email your preferences to Arlo U. Landolt, AAS Secretary, at aassec@rouge.phys.lsu.edu, and he will respond once final chair assignments are known.

International Astronomical Union Membership Database

As Secretary of the U.S. National Committee for the International Astronomical Union (USNC-IAU), I want to request that all IAU members from time to time login to the IAU website at <http://www.iau.org>, go to members, then to on-line Membership Directory, and double-check that your personal information in the database is correct. If corrections are needed, and they are for many individuals, please send corrections to iaupdate@iap.fr.

2003 AAS Elections Final Slate

The following people have been nominated for office; most of the terms begin June 2004. An election ballot will be enclosed in the December *Newsletter* and must be returned to the Secretary's office by **31 January 2004**.

Vice-President	Wallace L. W. Sargent Giuseppina Fabbiano
Secretary	John A. Graham
Councilors	Jill Bechtold Richard P. Binzel Karen S. Bjorkman Harvey B. Richer Ata Sarajedini Alan M. Title Greg B. Taylor
USNC-IAU, Cat. I	Edward F. Guinan Rolf Kudritzki
Nominating Committee	Timothy S. Bastian John R. Dickel Melissa McGrath Lee G. Mundy

left with a greater realization of the deep cultural issues that still hinder the full participation of women in professional life, and of the timescale over which changes might realistically be expected. A more complete report on the conference can be found in this issue and the December issue! The Society is grateful to Fran Bagenal, chair of the conference Organizing Committee, and to all who helped to put the conference together.

The second meeting is, of course, the XXV General Assembly of the IAU, held in Sydney, Australia, in July. Of the 895 new IAU members, 178 were from the U.S., bringing the number of U.S. members to nearly 2500, out of a total of some 9600 IAU members worldwide (26% of IAU members are from the US). IAU President Ron Ekers encouraged broader participation by the US in the affairs of the IAU and particularly urged us to expand the number of US members. Thanks also to the NSF and NASA for supporting us astronomers through the AAS Travel Grant Program. More than 100 US Astronomers received support to travel to Sydney.

The General Assembly also approved new bylaws, which may help to modernize the structure of the IAU. Under the new bylaws, IAU Divisions have the responsibility to recommend the formation of new Commissions as needed to reflect the frontiers and changing emphasis of astronomy, and existing Commissions are subject to a review after six years. The Executive Committee also approved a new Working Group on the Status of Women in Astronomy.

Sadly, the GA declined an invitation from the United States and the University of Hawaii for the IAU to meet in Honolulu in 2009 (congratulations are offered to Brazil, which will host the GA in 2009). The IAU has not met in US since the Baltimore General Assembly in 1988, and it may be a quarter century between General Assemblies in the US. The University of Hawaii deserves our thanks for their efforts to try to bring the GA back to the US.

Finally, let me convey our thanks to the hosts of the XXVth General Assembly in Sydney, the National Committee for Astronomy and the Astronomical Society of Australia, and to Harry Hyland and John Whiteoak, co-chairs of the National Organizing Committee, for their efforts to bring together such an outstanding international meeting. The meeting went flawlessly, the venue was superb, and all who attended enjoyed stimulating scientific sessions together with colleagues from all around the world. We look forward to the next General Assembly to be held in Prague in 2006.

Why Stay at AAS Meeting Hotels?

Caty Pilachowski, AAS President, catyp@astro.indiana.edu

October is the month when we all begin to make plans to attend the Winter Meeting of the AAS, coming up 4-8 January in Atlanta. As you make your plans, consider the advantages of booking a room in the meeting hotel, this time the Hyatt Regency Atlanta. The Society, of course, has a financial interest in where you stay, because the hotel provides free meeting space in return for which we guarantee a minimum block of guest rooms that will be used by meeting participants. This arrangement helps to keep the registration fees as low as possible. If we fall short of this block we may incur financial penalties.

In addition and importantly, staying in the meeting hotel also serves your interests, allowing you fuller and more convenient participation in the meeting and interaction with your colleagues. Diana Alexander, in the AAS Executive Office, negotiates quite favorable rates at the hotels, so the cost isn't as high as it might be. And be sure to book early—we're anticipating quite a turnout in Atlanta and late comers may have to stay in overflow hotels!

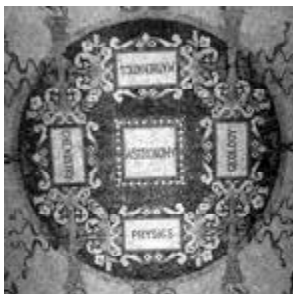
U.S. Physics Team Fulfills Goal in 2003

Representatives of the 2003 U.S. Physics Team won five medals and four special prizes at the 34th International Physics Olympiad held 2-11 August in Taipei, Taiwan. Although the competition is among individuals, an informal summary of scores showed that the United States was the top-ranking country out of the fifty-four participating nations followed by South Korea, Taiwan and Iran.

The selection process for the 2003 U.S. Physics Team began in January, when high school physics teachers from throughout the country nominated over 1400 physics students to be members of the 2003 Team. The 24 members of the team were selected from the group of semi-finalists based on their screening exams, transcripts, and letters of recommendation.

The 2003 U.S. Physics Team was sponsored by numerous scientific societies, corporations, foundations, and individuals, including the AAS, and AIP (and its member societies).

See <http://www.aapt.org/olympiad2003/> for more information.



Astronomy's Place in Washington

In a little known corner of the Library of Congress a series of ceiling mosaics highlights the great achievements of our civilization. Near to the mosaic shown here highlighting the physical sciences is a similar construction highlighting the humanities, with Poetry at the center. Note that Astronomy is at the center of the physical sciences in large-type font. This is either indicative of Astronomy's importance to our civilization or the fact that Astronomers tend to be near-sighted. If you find an image that highlights the importance of Astronomy to human culture, please submit it to marvel@as.org with a brief description. Photo: K. Marvel

Status of Women in Astronomy

Patricia Knezek (CSWA Chair, WIYN Observatory)

Meg Urry (Yale University)

CSWA Membership Changes

Greetings! As the incoming chair of the CSWA, I want first to express my thanks to our outgoing chair, Meg Urry, for her exceptional leadership over the past three years. She culminated her active and productive time as the CSWA chair by overseeing the highly successful Women in Astronomy II Conference (WIA II) held 27-28 June 2003 in Pasadena, CA. As her final act as chair, she has provided a comprehensive summary of the conference for the *AAS Newsletter*, which will appear in two parts. Part I, "Where Do We Stand?" is included below. Part II, "Where Do We Go From Here?" will appear in the December issue. I would also like to thank outgoing CSWA members David Helfand and Karen Kwitter for all their hard work and valuable insight.

Let's welcome incoming CSWA members James Ulvestad (NRAO/Socorro, NM), Stephanie Wachter (IPAC/Pasadena, CA), and Kimberly Weaver (GSFC/Greenbelt, MD). They will all be serving from 2003 to

2006. They join continuing members Michael Rupen (NRAO/Socorro, NM; 2001-2004), Amy Simon-Miller (GSFC/Greenbelt, MD; 2001-2004), Liliya Williams (U. Minnesota/Minneapolis, MN; 2001-2004), Neal Evans (U. Texas/Austin, TX; 2000-2005), Lisa Frattare (STScI/Baltimore, MD; 1999-2005), and myself, Patricia Knezek (WIYN Observatory/Tucson, AZ; 2002-2005). Please contact us if you have comments, questions, and/or suggestions. We also suggest that you to check out the CSWA web site, which is superbly maintained by Amy Simon-Miller, see www.aas.org/~cswa/.

Please note that there was no June 2003 issue of *STATUS*. We will be soliciting submissions for the January 2004 issue soon.

Finally, as a preface to Meg's summary, we want to recognize all of those who worked so hard to make WIA II such a pleasure to involved in. We look forward to the publication of the proceedings, and hope that all those who attended will help us to keep the ball rolling.

Summary of the Women in Astronomy II Conference

Part I: Where Do We Stand?

Diversity Breeds Excellence

In Pasadena at the end of June, blue skies and a flower-filled Caltech campus greeted nearly two hundred scientists and students looking at the diversity of the astronomical profession. For two days we listened to a star-studded lineup of leading experts on gender equality in science, and discussed the steps needed to make progress. Sessions on under-represented minorities in science and on potential legal remedies rounded out the program. A key theme was that diversity is essential if we are to achieve the highest level of excellence in our profession.

There was little overlap with participants in the first Women in Astronomy meeting, held in 1992 at the Space Telescope Science Institute in Baltimore. This is understandable for the large number of young people present, perhaps less so for our middle and senior faculties. One such double attendee, Elizabeth Griffin (who was at Cambridge in 1992 and is now at DAO), commented that the mood of the two meetings was quite different: then, we were angrier, and participants spent the first full day letting out all their pent-up frustrations. In 2003, we are asking, how do we get what we want? How can students succeed in graduate school, choose the best postdoctoral positions and entry-level jobs? How can mid-level astronomers acquire the information and expertise needed to advance to leadership positions? How can institutional leaders transform their institutions?

In a very good sense, we are victims of our own success—the numbers and visibility of women in astronomy are increasing, though apparently not at a rate commensurate with the availability of women in the talent pool. Instances of overt discrimination are rare; instead, a much more subtle obstacle known as gender schemas makes a man's success easier than a woman's. Talk about "the bad old days" is still worthwhile, though, because: (1) progress is not monotonic,

it is one step forward, one step back; and (2) some undergraduate women reported troubling, hostile environments, at the hands of their young male colleagues—notably, it isn't a story of older, traditional astronomers who just can't change, but of some in the new generation of young male scientists who apparently can't credit young women with intelligence, dedication, or a future in astronomy.

Astronomers also looked closely at the object lessons from chemistry, where the numbers of undergraduate degrees and PhDs look impressive but drop sharply at higher levels. Half of the undergraduate and Master's degrees in Chemistry go to women, and a third of the Ph.Ds. (As USC law professor Susan Estrich told the meeting, "I've got some good news: there's



WIA II participants gather for a group photo on the Caltech campus. Over 150 people attended the meeting. Photo Credit: Fran Bagenal. (U. Colorado)



Susan Estrich (USC, author of 'Sex and Power'), Steve Beckwith (STScI) and Andrea Dupree (CfA Harvard) chat at a reception before the banquet. Estrich was the invited after-dinner speaker. Photo Credit: Fran Bagenal (U. Colorado).

equality at the bottom!") Yet women are all but absent from Chemistry faculty—fewer than 10% of recent hires are women (and the overall average is similarly low). Clearly greater numbers at the entry level do not lead inexorably to equality in the academy.

What are the numbers for astronomy? The Pasadena meeting made

clear the critical need for high-quality data. We cannot rely on the irregular, infrequent efforts of untrained volunteers—data collection should be an administrative responsibility of our professional bodies. Based on the few data that are currently available, presented by Rachel Ivie (AIP), Kevin Marvel (AAS), and Jennifer Hoffman (Rice University; the latter are available online at www.ruf.rice.edu/~jhoffman/stats/ and are also linked from the CSWA page), the numbers of women in astronomy are growing but they still lag behind men. For example, the numbers of AAS prizes awarded to women remains low. As Denise Denton, Dean of Engineering at the University of Washington explained, disproportionate winnowing like this is the hallmark of poor selection processes.

There is some potentially good news in the numbers too. More than half of the astronomers in the youngest cohort in the AAS—those in the age bracket from 18 to 23, and thus mostly undergraduates and beginning graduate students—are women. It is critical to follow this "60% cohort" to see if the fraction of women holds steady, and to relate the experiences of these women to their progress in the field.

Another key message from the conference: numbers do not tell the whole story. The present-day experiences of women astronomers are vastly different from those of most men. Women feel more dissatisfaction with their work environments, are less likely to feel they fit in, and experience poorer communication with their leadership, all of which leads to frustration and feelings of inadequacy. Speakers at the conference, including Virginia Valian, a sociologist from Hunter College, explained clearly the origins of this disparity. Gender bias is alive and well in our society, even if it is largely unconscious. Women are undervalued, men are overvalued. As Debra Rolison, a chemist from the Naval Research Laboratory explained, "Affirmative action is alive and well—for white men!"

To give just one example, from Valian's book, *Why So Slow: The Advancement of Women*, a woman and man giving the identical talk are perceived very differently. Test groups accept the man's authority and are impressed by his words, while reactions to the woman are markedly more negative, in some cases extremely so—for exactly the same words, delivered, incidentally, by trained actors. When the woman is given a proper introduction,

outlining her qualifications, then the gender disparity goes away. Apparently, without external validation, the assumption is that the woman does not know what she is talking about. It isn't hard to imagine how this could translate to our own field, with a young woman giving a talk at a meeting, or a female teacher speaking to her class. How can we address these issues?



Anneila and Wal Sargent (Caltech) are seen in the foreground at a banquet table with Anne Kinney (NASA Headquarters), Antonella Nota, and Carol Christian (both at STScI). Wal Sargent led the Local Organizing Committee. Photo Credit: Fran Bagenal (U. Colorado).

Look for **Part II: Where Do We Go From Here?** in the December Newsletter.

Employment Committee

Good Questions to Ask When Considering Graduate School in Astronomy

It will soon be that time of year—time to apply to graduate school or move on to postdoctoral fellowships and other jobs. This month's column is targeted at people considering graduate school as well as those in the midst of a graduate program. The next column will feature some thoughts on employment options after a Ph.D. in Astronomy/Astrophysics.

This list was prepared by Liese van Zee (now assistant professor at Indiana University, Bloomington) and written from a draft of Graduate School in Science and Engineering: Tips for Students and Faculty by Marsha Lakes Matayas, from statements at the Recruiting and Retaining Women in Physics Conference, held 2-3 November 1990, in Chevy Chase, Maryland, and from a discussion within Women in Math and Science at Haverford College.

Search committees and department chairs should be prepared to answer these questions or place the answers on their institutional web page.

continued next page

Ask the graduate department:

- ? What are the academic regulations/requirements for graduating?
- ? What percentage of the students pass the qualifying exams the first time? How many chances are there?
- ? Are a large percentage of the students graduating with only a terminal Master's degree?
- ? What is the average time to obtain a Ph.D.?
- ? When (and how) do you choose your advisor? How difficult is it to switch advisors after, say, a year?
- ? Who selects the dissertation committee?
- ? Is the support offered as a teaching or as a research assistantship? How much is the stipend?
- ? How many working hours per week is expected for a TA or RA?
- ? Are you guaranteed support for the entire time, or is it on a year by year basis? If it is year by year, what would disqualify you?
- ? Is there a teaching requirement? How are teaching assignments made (lottery or choice)?
- ? What sort of computing facilities do they have?
- ? What are their provisions for housing, day care, health insurance, etc.?

Ask current graduate students:

- ? Do different research groups interact? Is there collaboration within the department or across departments?
- ? What is the actual time commitment for a TA/RA?
- ? Is the TA/RA stipend enough to live on in that area?
- ? Do the students have enough time for a social life? Is the type of social life you desire available?
- ? What are the environs like? Do you like them?
- ? Do graduate students have access to athletic and other university facilities?
- ? Is there a graduate student organization?
- ? Are the provisions for housing, health insurance, etc. adequate?

Talk to current graduate students before you choose an advisor to learn:

- ? Do most of the students like working with this research advisor?
- ? What is the average time for a Ph.D. in her/his lab?
- ? How much monetary support is there for research?
- ? Is the prospective advisor sensitive to women's issues?
- ? How independent is the research of the students?
- ? Do the students work together (with other students and/or the advisor)?
- ? Is the advisor personally involved in the research? How frequently is the advisor available?
- ? Do the students present their work at national conferences? Who pays for attending such conferences?
- ? Does the advisor take an active role in placing her/his students? Do students go into industry or academia?
- ? How quickly does the advisor publish completed work?

Specific issues for women:

- ? It has been said: "do not go to a place where there are no female faculty."
- ? Talk to female graduate students in the department!!
- ? Do they have women's support groups? What do they do? Do they have one specific to your field?
- ? Is there a women's center?

Additional suggestions:

- ? Choose a research area that you are interested in. However, still choose an advisor with whom you get along!
- ? Choose an advisor with broad research interests.
- ? Your advisor should be willing to help you get through in a timely manner, i.e. assist you with meeting the deadlines for preliminary exams, proposal preparation, and dissertation.
- ? Your advisor should give you some research freedom; do not let yourself be a laboratory technician for five (or more) years.
- ? Attend research seminars offered at your university and annual meetings of professional organizations.
- ? If possible, participate in drafting grant proposals so you will know how to write successful ones.
- ? Try to cultivate your "third recommender;" most post-doc positions will require three letters of recommendation.
- ? Make an effort to present your work at departmental and professional meetings.

Status of Minorities in Astronomy

Keivan Stassun, Chair, keivan.stassun@vanderbilt.edu

Special Session at Atlanta AAS Meeting

The Committee on the Status of Minorities in Astronomy (CSMA) will host a Special Session at the upcoming AAS Meeting in Atlanta. The purpose of the session is to introduce AAS Members to professional organizations of minority scientists. A panel of representatives from the National Society of Black Physicists (NSBP), the National Society of Hispanic Physicists (NSHP), the American Physical Society Committee on Minorities, and others will be on-hand to describe their organizations, their activities, and the members they serve. Learn about scholarship opportunities, mentoring/job networks, and other initiatives aimed at enhancing the recruitment and retention of minorities in physics and astronomy. Learn about opportunities to meet and recruit minority students at the schools that these organizations represent, including minority-serving institutions.

CSMA Website Has Moved

Please note that the CSMA website has moved. Please update your bookmarks: <http://www.vanderbilt.edu/csma>.

Seeking Recent Minority Graduates

The CSMA would like to continue highlighting recent minority Ph.D. recipients in its *SPECTRUM* newsletter. If you are a recent minority graduate, or know one, please contact the *SPECTRUM* editor at keivan.stassun@vanderbilt.edu.

Education News

George D. Nelson, Education Officer

As the new Education Officer at AAS I want to first acknowledge my friend and predecessor, Bruce Partridge for the tremendous contributions he made to astronomy education during his six-year tenure. Under Bruce's leadership the society officially acknowledged its commitment to education by establishing the Education Office and filling the position of Director of Educational Activities. Among many other accomplishments achieved under his guidance, the Astronomy Education Board (AEB) developed a long-range plan that focuses the Society's efforts to improve astronomy education at all levels, especially for undergraduates and graduate students. Well-attended astronomy education sessions are now part of every society meeting including an important ongoing dialog on "Astronomy 101."

Please take a look at the web site, www.aas.org/education/, to become more familiar with the Society's education activities. There you will find a copy of the long-range plan and links to useful education sites. You will also find a description of ComPADRE: Communities for Physics and Astronomy Digital Resources in Education, a collaborative project to create well organized, digital collections of high quality educational materials in physics and astronomy that was described in last December's *Newsletter*. The AAS role in ComPADRE is led by Susana Deustua, Director of Educational Activities.

In August, Caty Pilachowski and I sent a letter on behalf of the AAS to the New Mexico State Board of Education opposing the addition of Creationist and Intelligent Design language into the newly written state K-12 science standards in New Mexico. We will continue to react to these challenges as they arise and encourage AAS members to be vigilant. A useful resource on astronomical evolution, *An Ancient Universe: How Astronomers Know the Vast Scale of Cosmic Time*, was written by Andrew Fraknoi, George Greenstein, Bruce Partridge and John Percy as a special edition of the *Universe in the Classroom*. The booklet is published by the AAS and the ASP. It can be found online at www.astro.society.org/education/publications/tnl/56/index.html.

Over the next three years it is my hope that the engagement of the Society and its members in discussions and activities related to improving astronomy education will continue to expand. There will be new opportunities for funding for astronomy education and development projects from the states and from federal agencies. The AAS can participate in or facilitate the development of competitive proposals. Please contact me, Susana Deustua, or any of the Astronomy Education Board members with suggestions or comments. The current members of the AEB are: Andrew Fraknoi, George Greenstein, Randy L. Phelps, Grace Deming, Chris D. Impey, Travis Rector, C. Renee James, Douglas O. Richstone, and Larry Lebofsky. A board retreat is being planned for November and your input is encouraged and welcomed.

News from NSF

Eileen D. Friel, Executive Officer, Division of Astronomical Sciences, efriel@nsf.gov

New Faces at AST

The Division welcomes Dr. Randy Phelps as the new program director for Education and Special Programs in Astronomy. Randy comes to AST on a two-year visiting position from California State University at Sacramento where he has been a professor for five years. He also holds a position as Adjunct Associate Professor at the University of California, Davis. Randy is known for his activities to promote undergraduate research, most recently as a member of the AAS Astronomy Education Board and organizer of a recent AAS session on undergraduate research and education. Randy's scientific expertise ranges from star formation and stellar evolution to using star clusters as tracers of galactic evolution. He will be primarily responsible for the CAREER, REU, and astronomy postdoctoral fellowship programs, as well as NSF-wide programs that seek to broaden participation.

New GPG

NSF has published a revised version of the NSF *Grant Proposal Guide* (GPG) (NSF 03-041) that is effective for all proposals submitted after 1 June 2003. This document supercedes all prior versions of the GPG and can be found at: <http://www.nsf.gov/pubsys/ods/getpub.cfm?gpg>. This revision implements a number of important changes to NSF policies and procedures, including: a) a reminder to proposers that if both merit review criteria are not addressed separately within the one page Project Summary, the proposal will be returned without review, b) a revision to the NSF cost sharing policy, which states that proposers of unsolicited proposals should not include cost sharing amounts in the proposal budget, and c) addition of a *Proposal Preparation Checklist* to aid in ensuring that proposals comply with NSF proposal preparation guidelines.

Research Experiences for Undergraduates Sites

The Astronomy Division supports a large number of research opportunities for undergraduate students through NSF's Research Experiences for Undergraduates (REU) program. The number of Astronomy REU sites has grown in the past several years to the list of 19 shown below. Many of the REU sites funded by the Physics Division at NSF also offer research experiences in astrophysics. This diverse array of sites provides opportunities in a wide range of research topics and a variety of working environments. More information on the NSF REU program and full contact information for sites in all disciplines can be found on the NSF web site at: <http://www.nsf.gov/home/crssprgm/reu/start.htm>. The AAS Education Office also provides a general bulletin board for astronomy REU programs at: www.aas.org/education/reusites.html.

continued on page 15

Division for Planetary Sciences

Melissa McGrath, DPS Treasurer

Over 700 attendees gathered for the 35th annual Division for Planetary Sciences (DPS) meeting from 2-6 September in Monterey, CA. The meeting program contained 50 sessions with over 500 poster and oral papers presented. The scientific program was highlighted by plenary sessions on Mars Odyssey results, Kuiper Belt Objects, the climates and atmospheres of early Earth and Mars, and extra solar planets. The meeting banquet was held at the Monterey Bay Aquarium, where banquet attendees could browse the displays and enjoy stunning vistas from the Aquarium patio. NSF and NASA town hall meetings, including a special presentation by Kevin Marvel, the Deputy Executive officer of the AAS, gave meeting goers a chance to hear about the latest public policy issues.



DPS meeting local organizing committee chair Ted Roush (NASA/Ames Research Center) and outgoing DPS Chair Rick Binzel (MIT) confer over last minute details in preparation for the society's 35th annual meeting.



The DPS 2003 prize winners Reta F. Beebe (Harold Masursky prize), Steven J. Ostro (Gerard P. Kuiper prize) and Robin M. Canup (Harold C. Urey prize).

The Society's annual prizes were presented in a plenary session on Friday afternoon. The Harold Masursky Prize, awarded for outstanding service to planetary science and exploration, was presented to Reta F. Beebe of New Mexico State University. Following the receipt of her award, Reta showed a short video

honoring the life and achievements of Harold Masursky. The Gerard P. Kuiper prize, awarded for outstanding contributions to the field of planetary science, went to Steven J. Ostro (Jet Propulsion Laboratory/CalTech) for his pioneering work on radar studies of asteroids, which he summarized in his talk entitled "Radar Observations of Asteroids." The Harold C. Urey prize, awarded for outstanding research by a young scientist, was given to Robin M. Canup of Southwest Research Institute (Boulder), and was followed by her talk "Satellite Formation and the Origin of the Moon."

New DPS Officers and Committee members take office at the annual Business meeting, which was held on Friday morning. The DPS Committee voted to split the current Secretary-Treasurer position into two separate positions, and appointed Linda French to the Secretary position for the term 2003-2006. This year's Officers are: William D. Cochran, Chair; William B. McKinnon, Vice-Chair; Linda French Emmons, Secretary; Melissa A. McGrath, Treasurer; Ellis D. Miner, Press Officer; and Larry A. Lebofsky, Education and Public Outreach Officer. The DPS Committee currently consists of the following members: Fran Bagenal, James Bell, Rick Binzel (past Chair), Catherine de Bergh, Ann Sprague, and Paul Weissman.

The Division appointed Wes Huntress as the new member of the Federal Relations Subcommittee, and the DPS membership elected Rosaly Lopes as the new member of the Nominating Subcommittee. Two new members were appointed to the *Icarus* Editorial Board: Robin Canup and Emmanuel Lellouch. The DPS Committee voted to hold the 2006 DPS meeting in Pasadena, California. Next year's annual DPS meeting will be held from 7-12 November in Louisville, KY.



Al Harris explains plans for the 2006 meeting in Pasadena, CA to the DPS Committee.

Historical Astronomy

The Future of Astronomy's Past

E. Griffin (PDPP), M. Castelaz (PARI) and T.R. Williams (HAD)

The Historical Astronomy Division (HAD), in harmony with the Pisgah Astronomical Research Institute (PARI) and the IAU Working Group for the Preservation and Digitization of Photographic Plates (PDPP), will jointly hold a Special Session at the Atlanta meeting on Monday, 5 January 2004 at 7:30 pm.

Astronomy has a very specific Past, in the form of about 3 million photographic plates distributed in about 40 observatory archives worldwide. Those observations (both images and spectra) enabled the development of the science of astrophysics. Those same observations are also unrepeatably and, if made digital, could complement modern research uniquely and decisively. Imminent supernovae, fluctuations in the very final stages of stellar evolution, refined orbits of so-called near-Earth objects, long (and quite ill-understood) photometric variability, proper motions measured across a century, variability in stellar chromospheres and changes in the Earth's ozone concentrations, are examples of science that has only been possible through access to last century's observations.

Nevertheless, those observations are now threatened by a variety of forces. Moves are afoot to rescue the information as well as the physical plates before becoming irretrievably lost, and individuals as well as observatories are invited to voice their opinions, ideas or concerns. The issues were discussed during a specially-convened meeting at the recent IAU GA in Sydney. We would now like to continue that discussion in North America, where most of the major collections can still be found.

Interested parties are cordially invited to the Round Table discussion in Atlanta.

Observatory Annual Reports

The annual deadline for receipt of manuscripts for publication in the paper edition of the *BAAS* is **1 November 2003**. However, LaTeX manuscripts may be submitted anytime during the year. They will be processed and posted online as received. Reprints may be ordered and will be printed throughout the year.

Reports may be submitted either electronically (LaTeX) or, if necessary, as a word processing file (Word or WordPerfect). Instructions for both formats are available online: www.aas.org/publications/baas/baasems.html#obsems.



Masursky prize winner Reta Beebe shares a light-hearted moment with Don Hunten after the prize award ceremony.



Nick Schneider and fellow DPS members take advantage of the internet cafe at the Monterey DPS meeting.



Newly-appointed DPS Secretary Linda French Emmons.



A beautiful coastline vista in Monterey.

Calendar

Listed are meetings or other events that have come to our attention (new or revised listings noted with an asterisk). Due to space limitations, and 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 crystal@as.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://cadwww.hia.nrc.ca/meetings>.

AAS and AAS Division Meetings

203 Meeting of the AAS

4-8 January 2004 — Atlanta, GA
Contact: AAS Executive Office (diana@as.org)

35th DDA Meeting

20-24 April 2004 — Cannes, France
Contact: Allesandro Morbidelli, Local Host (morby@obs-nice.fr)
Philip Nicholson, Program Chair (icarus@astro.cornell.edu)
<http://dda.harvard.edu/>

204th Meeting of the AAS

30 May - 3 June 2004 — Denver, CO
Contact: Michael Shull (mshull@casa.colorado.edu)

Other Events

*X-Ray Timing 2003: Rossi and Beyond

3-5 November 2003 — Cambridge, MA
Contact: Philip Kaaret (pkaaret@cfa.harvard.edu)
<http://hea-www.harvard.edu/xrt2003/>

The Formation and Evolution of Massive Young Star Clusters

17-21 November 2003 — Cancun, Mexico
Contact: Henny J.G.L.M. Lamers (lamers@astro.uu.nl)
Linda J. Smith (ljs@star.ucl.ac.uk)
www.star.ucl.ac.uk/clusters

IAU Coll. 194: Compact Binaries in the Galaxy and Beyond

17-22 November 2003 — La Paz, Mexico
Contact: Gagik Tovmassian (iau194@astrosen.unam.mx)
<http://www.astrosen.unam.mx/~iau194>

Payload and Mission Definition in Space Sciences

17-28 November 2003 — Tenerife, Canary Islands
Contact: Ms. Nieves Villoslada or
Ms. Lourdes González (xvwinter@ll.iac.es)
<http://www.iac.es/winschool2003/info.html>

*Multiwavelength AGN Surveys

8-12 December 2003 — Cozumel, Mexico
Contact: Rosario Sanchez (agn2003@inaoep.mx)
<http://www.inaoep.mx/~agn2003/>

*SPACEPART '03, the Second International Conference on Particle and Fundamental Physics in Space

10-12 December 2003 — Washington, D.C.
Kate Scholberg (spacepart03@mit.edu)
<http://www-lns.mit.edu/SpacePart03/>

Hawaii International Conference on Sciences

15-18 January 2004 — Honolulu, HI
Contact: Andrew Burge (sciences@hicsciences.org)
<http://www.hicsciences.org>

5th Intergral Workshop, The Integral Universe

16-20 February 2004 — Munich, Germany
Contact: Dr. Giselher Lichti (grl@mpe.mpg.de)
<http://astro.estec.esa.nl/Integral/>

*Astronomical Polarimetry: Current Status and Future Directions

15-19 March 2004 — Waikoloa, HI
Contact: Andy Adam (pol2004@jach.hawaii.edu)
<http://www.jach.hawaii.edu/JACpublic/JAC/pol2004/>

*Cores, Disks, Jets & Outflows in Low & High Mass Star Forming Environments: Observations, Theory, & Simulations

13-16 July 2004 — Banff, Alberta, Canada
Contact: Rene Plume & Rachid Ouyed (plume@ism.ucalgary.ca)
<http://www.ism.ucalgary.ca/meetings/banff>

Cosmos in the Classroom 2004: A Symposium on Teaching Introductory Astronomy for Non-Science Majors

16-18 July 2004 — Medford, MA
Contact: Andrew Fraknoi (fraknoiandrew@fhda.edu)
www.astrosociety.org

*Second TPF/Darwin International Conference: Dust Disks and the Formation, Evolution and Detection of Habitable Planets

26-29 July 2004 — San Diego, CA
Contact: Steve Unwin (stephen.unwin@jpl.nasa.gov)
http://planetquest.jpl.nasa.gov/TPF_darwin/

*Astrophysics in the Far Ultraviolet: Five Years of Discoveries with FUSE

2-6 August 2004 — Victoria, BC, Canada
Contact: G. Sonneborn (george.sonneborn-1@nasa.gov)
<http://fuse.pha.jhu.edu/users/conference/conference.html>

Modest 5-Modeling Dense Stellar Systems

11-14 August 2004 — Hamilton, Ontario, Canada
Contact: Alison Sills (asills@mcmaster.ca)
<http://www.manybody.org/modest-5.html>

Massive Stars in Interacting Binaries

16-20 August 2004 — Quebec province, Canada
Contact: A. Moffat/N. St-Louis (moffat@astro.umontreal.ca)
stlouis@astro.umontreal.ca

AMERICAN ASTRONOMICAL SOCIETY
INTERNATIONAL TRAVEL GRANT PROGRAM APPLICATION FORM

Full Name _____ Year PhD Received _____

Institution _____ Current Position _____

Address _____

Telephone _____ Fax _____ Email _____

Please check all the boxes below where the associated statements apply:

Applicant is a Federal Employee. Indicate below to whom the grant check should be made out:

Applicant is a graduate student. Provide advisor's name, contact information and expected degree completion date. Attach recommendation letter from advisor to this application.

Anticipated Degree Date _____

Indicate on the line below the complete meeting information (title, date and location); please use a separate application form for each meeting:

Please **justify need to attend** and **describe the activities** in which applicant will participate (e.g. invited speaker, Commission member, contributing paper, etc.).

Estimated air fare _____ Anticipated carrier _____

NB: Maximum allowable fare, economy rate round trip from nearest large airport. If not a US flag carrier, please explain below why not.

Applicant sought funding from other sources. Explain why funds could not be obtained from applicant's grant or institution (attach additional pages, if necessary):

Please sign the following statement: If I receive this travel grant, I will comply with all reporting requirements, acknowledge the grant in any related publication (i. e., conference proceedings), and return my report in a timely manner.

Applicant's Signature _____ Date _____

DEADLINES:

20 February 2004, for meetings between 20 February 2004 and 6 August 2004

6 August 2004, for meetings between 6 August 2004 and 25 February 2005

MAIL OR FAX APPLICATION TO:

Travel Grant Selection Committee, American Astronomical Society, 2000 Florida Ave., NW, # 400, Washington, DC 20009-1231

Fax: 202-234-2560

Announcements

AIP State Department Fellowship

This fellowship program represents an opportunity for scientists to make a unique contribution to the nation's foreign policy. AIP will sponsor one fellow annually to spend a year working in a bureau or office of the State Department, providing scientific and technical expertise to the Department while becoming actively and directly involved in the foreign policy process. Fellows are required to be US citizens and members of at least one of the 10 AIP Member Societies at the time of application. Qualifications needed include a Ph.D. in physics or closely related field, or equivalent research experience. Applicants should possess interest or experience in scientific or technical aspects of foreign policy. Applications should consist of a letter of intent, a two-page resume, and three letters of reference. Please visit <http://www.aip.org/mgr/sdf.html> for more details. All application materials must be postmarked by **1 November 2003** and sent to: AIP State Dept Science Fellowship, American Institute of Physics, ATTN: Audrey Leath, One Physics Ellipse, College Park, MD 20740-3843. For additional information or questions, please contact Audrey Leath at aleath@aip.org or (301) 209-3094.

Nominations for COSPAR Awards and Medals

The Committee on Space Research (COSPAR) is seeking candidates to be nominated for COSPAR Awards and Medals, which recognize the outstanding achievements of space scientists throughout the world. COSPAR will present the awards at its 35th Scientific Assembly to be held on 18-25 July 2004 in Paris, France. See <http://www.cosparhq.org> for further information.

It is important to honor the contributions of your colleagues. Please take a moment to consider nominees for the following awards and medals:

COSPAR Space Science Award - honors a scientist who has made outstanding contributions to space science.

COSPAR International Cooperation Medal - awarded to a scientist (or group of scientists) who has made distinguished contributions to space science and whose work has contributed significantly to the promotion of international scientific cooperation.

COSPAR William Nordberg Medal - awarded for distinguished contribution to the application of space science.

COSPAR Distinguished Service Medal - serves to honor extraordinary services rendered to COSPAR over many years.

COSPAR/Massey Award - an award of the Royal Society of London and recognizes outstanding contributions to the development of space research in which a leadership role is of particular importance.

COSPAR/Vikram Sarabhai Award - awarded by the Indian Space Research Organization for outstanding contributions to space research in developing countries.

COSPAR/Zeldovich Medal - awards are conferred by the Russian Academy of Sciences to young scientists for excellence and achievements. Medals are presented to a scientist in each of COSPAR's Scientific Commissions.

Nomination forms can be obtained from Pamela Whitney (202-334-3477, e-mail: pwhitney@nas.edu) at the National Research Council, Space Studies Board (SSB), which is the U.S. adhering body to COSPAR. All nominations will be processed by the SSB and must be endorsed by the U.S. National Representative to COSPAR, Dr. Ed Stone. Completed nomination packages must be submitted to the SSB no later than **10 October 2003**.

NSO Observing Proposals

The current deadline for submitting observing proposals to the National Solar Observatory is **15 November 2003** for the first quarter of 2004. Forms and information are available from the NSO Telescope Allocation Committee at P.O. Box 62, Sunspot, NM 88349 for Sacramento Peak facilities (sp@nso.edu) or P.O. Box 26732, Tucson, AZ 85726 for Kitt Peak facilities (nsokp@nso.edu). A TeX or PostScript template and instruction sheet can be emailed at your request or obtained by anonymous ftp from <ftp.nso.edu> (cd `observing_templates`) or downloaded from the WWW at <http://www.nso.edu/general/observe/>. A Windows-based observing-request form is also available at the WWW site. Users' Manuals are available at <http://www.nso.edu/nsosp/dst/> for the SP facilities and <http://nsokp.nso.edu/> for the KP facilities. Proposers to SP may inquire whether the Adaptive Optics system may be available for their use. Observing time at National Observatories is provided as support to the astronomical community by the National Science Foundation.

Annie J. Cannon Award: Call for Nominees

The Annie Jump Cannon Award in Astronomy honors a woman in the early stages of a career in astronomy. Preference is given to nominees who have held a doctorate in astronomy or a related field for at least a year. There are no restrictions on the nominee's nationality or on the location of her research. The award is \$5,000. All nominating materials must be received by the AAUW Educational Foundation by **10 February 2004**. Notification of the award will be mailed by 30 April 2004 and the award disbursement will be made by July 2004. Questions about the award and nominations should be directed to the American Association of University Women Educational Foundation at 202-728-7602; by fax at 202-463-7169; by mail, 1111 Sixteenth Street, NW, Washington, DC 20036; or by email at foundation@aauw.org. The award recipient will be selected by the AAUW Educational Foundation Board of Directors in cooperation with the AAS Annie Jump Cannon Award Advisory Committee.

AAS Small Research Grant Proposals Deadline

The American Astronomical Society provides two opportunities annually to apply for these grants to cover the costs associated with any type of astronomical research. The grants are open to both US and foreign astronomers with PhD or the equivalent; graduate students are not eligible. Priority is given to astronomers from smaller, less well-endowed institutions. See page 19 of the *AAS Membership Directory* or the AAS Website, "Grants," for complete information about applying. For evaluation at the January committee meeting, proposals must be submitted by **5 December 2003**.

Pollock Grant Proposals Due

Dudley Observatory invites applications for the Pollock Award, a grant of up to \$5,000 for a project on the history of astronomy. The deadline is **14 November 2003**. See <http://www.dudleyobservatory.org> for details.

“Turn Off Your Cell Phone” Contest!!

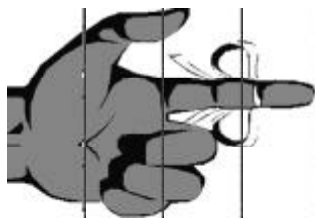
The AAS is seeking PowerPoint slides to remind members to turn off their cell phones before oral sessions. PowerPoint slides should be humorous and astronomically themed. Three slides will be chosen and run throughout AAS meetings; and winners will receive a banquet ticket for themselves or a guest at any 2004 AAS Meeting Banquet.

Submit slides as an attachment to contest@as.org by Friday, **31 October 2003**. Winners will be announced in the December *Newsletter*.

Visa Information for Foreign Scientists Traveling to the United States

The National Academies has compiled information on the new visa process for foreign scientists visiting the US. Please let your international colleagues know of its existence. The AAS has registered future AAS meetings with the National Academies, which could help foreign scientists obtain visas to attend.

The process to register other meetings as well as detailed information about the new rules and regulations for visiting foreign scientists are all available on this informative web site: <http://www7.nationalacademies.org/visas/>.



It's That Time Again... Time to Renew Your AAS Membership and Subscriptions

The 2004 AAS Membership Renewal Invoices will be mailed during the first two weeks of

October. We encourage you to take a moment and return your payment and the bottom portion of your invoice upon receipt. By doing so, you will not only eliminate the need for reminder notices, but also ensure your member services and subscriptions continue without interruption.

And...please consider using your invoice as well to make a tax-deductible contribution to the AAS and/or the Division of your choice. Your dollars will provide much needed support for non-revenue programs sponsored by the AAS, DDA, DPS, HAD, HEAD, and/or SPD.

Contact Dennis Renner at dues@as.org if you do not receive your invoice by **3 November 2003** or to answer your renewal questions.

NSF News continued from page 9

REU sites:

American Museum of Natural History
Arkansas-Oklahoma Center for Space and Planetary Science
California State University, Los Angeles
Cerro Tololo Inter-American Observatory, NOAO
Cornell University
Indiana University
Kitt Peak National Observatory, NOAO
Maria Mitchell Observatory
McDonald Observatory, University of Texas
MIT Haystack Observatory
National Astronomy and Ionosphere Center – Arecibo Observatory
National Radio Astronomy Observatory – Green Bank, Socorro, Charlottesville and Tucson
National Solar Observatory – Sunspot and Tucson
Northern Arizona University
Smithsonian Astrophysical Observatory
Southeastern Association for Research in Astronomy
University of Hawaii at Manoa
University of Wisconsin
University of Wyoming

From the New Assistant Director for MPS

In June Dr. Rita Colwell appointed me to a two-year term as the Assistant Director for Math and Physical Sciences during which I will take a leave from The University of Chicago. I am very excited about leading the MPS Directorate, and in particular, working with Wayne Van Citters and Joseph Dehmer (Division Director for Physics) to realize the great opportunities for discovery in astronomy and at the interface of astronomy with physics. I cannot remember a more exciting time! (I plan to take advantage of NSF's policy that allows its staff to remain active in research by being a one-day a week cosmologist in Chicago.) I have already heard from many AAS members, and because I believe my number one credential for this job is my strong connection with the research community, I hope that you will continue to share your ideas with me.

Michael Turner

**Abstract Deadline
for Atlanta Meeting
Wednesday
15 October 2003
9pm EDT**

ASP News

Michael Bennett, Executive Director mbennett@astrosociety.org

Four Board Members Elected

The ASP membership has elected four members of the Board of Directors, returning one incumbent and selecting three new members. Their terms began 1 September 2003.

James Kaler, Professor of Astronomy at the University of Illinois, was re-elected to his second three-year term. Known to the research community for his work on planetary nebulae, Jim has long been active in educational outreach as well. He has written numerous articles and several introductory astronomy books, maintains several educational web sites, has created three ASP slide sets, and lectures widely. He has even been the subject of a planetarium show, *The Stargazer*, produced under the auspices of the Great Lakes Planetarium Association and shown in several planetariums in that region! Jim continues as Chair of the ASP Publications Committee.

Debra Fischer has just moved to San Francisco State University from UC Berkeley, and continues to work on the planet search team led by Geoff Marcy and Paul Butler. Her research has focused on the detection of extrasolar planets with an emphasis on the Keplerian modeling of multiple planet systems. Debra is a long-time member of the ASP and has become one of Project ASTRO's longest-serving volunteer astronomers, having "adopted" her first classroom in 1995 while still a graduate student at San Francisco State University.

Terry Mann, a very active amateur astronomer, is currently Vice-President of the Astronomical League, an organization of over 200 astronomy clubs comprising some 20,000 members. She chairs the League's awards programs and their International Space Station-Amateur Telescope project. In addition to doing observing and photography with her 14-inch telescope, Terry is an active "outreach amateur astronomer." She has been a Project ASTRO volunteer, serves as a JPL Solar System Ambassador, and still finds time to host class visits to her backyard observatory.

Tim Slater is an Associate Professor of Astronomy at the University of Arizona, and directs the University's Science and Mathematics Education Center as well. As an education researcher he focuses on identifying student difficulties in learning astronomy and on improving astronomy teaching at the elementary, secondary, and introductory college levels. He is participating in the Education and Public Outreach programs for NASA's Messenger, SOFIA, and SIRTf missions.

continued on page 17

Astrophysical Activities at the Kavli Institute for Theoretical Physics

Lars Bildsten, Permanent Member, KITP and Professor of Physics, UCSB

The Kavli Institute for Theoretical Physics (KITP) is a National Science Foundation funded institute located on the campus of the University of California, Santa Barbara. The KITP's purpose is to contribute to the progress in theoretical physics.

A New Opportunity: Emerging Topics in Theoretical Physics -

The KITP will begin conducting short programs focused on emerging topics in theoretical physics. KITP's director, David Gross, should be contacted directly for information before a proposal is prepared.

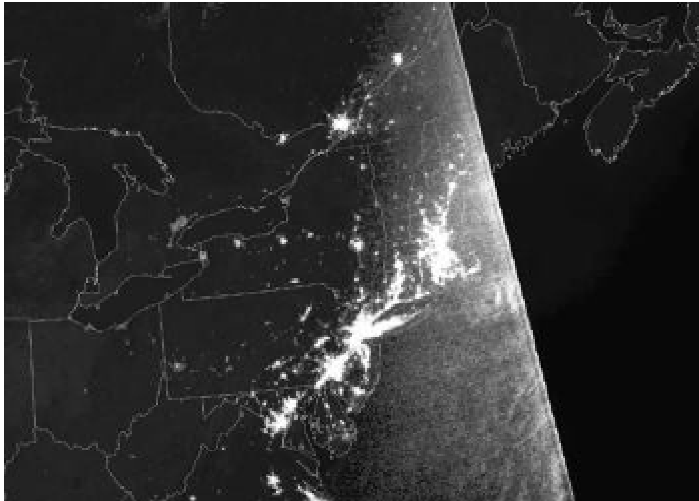
Intensive Studies - The major activity of KITP are the three to six month programs of intensive study of a particular topic. These involve at least 20 visiting senior scientists (post-Ph.D.) in residence at all times. We encourage minimum stays of one month. Applications are currently being accepted for three programs in the 2004-2005 academic year. See <http://www.kitp.ucsb.edu/activities/future>, for information.

Program Proposals Welcomed - Scientists interested in proposing programs for the 2005-2006 academic year should contact any of the astrophysicists of the KITP's Advisory Board, the director of the KITP or the astrophysics permanent member for information on proposal preparation. Decisions are made in February 2004, and full proposals should be at the KITP by early December 2003. Visit <http://www.kitp.ucsb.edu/activities/suggest/> for further information.

Graduate Student Programs - Graduate students can participate at the KITP either as an affiliate of a visiting senior member (this is typically the case for a graduate student who accompanies their thesis advisor as a participant) or as a Graduate Fellow. The graduate fellowship program offers a unique opportunity for a select group of physics graduate students to spend a period of five to six months at the KITP, participate in KITP research programs and broaden their understanding of physics in areas of current research. Students cannot apply to the program directly. The Graduate Fellows will be fully supported during their stay at the KITP. For participation in the fall of 2004, nominations must be received by 15 May 2004. See http://www.kitp.ucsb.edu/activities/grad_fellows for information.

continued on page 17

Dark Skies yes, but maybe not this way...



The National Oceanic and Atmospheric Administration released the above two images shortly after the blackout on 14 August. The image on the left shows the night before the blackout on 13 August, while the image on the right shows the situation at about 9:03 pm the night of the blackout. Photos courtesy NOAA/DMSPP (www.noaa.gov/stories/s2015.htm). The International Dark Sky Association (www.darksky.org) works to reduce the upward glare from poor lighting to the benefit of astronomers both professional and amateur.

ASP News continued from page 16

Continuing as ASP officers and board members are Catharine Garmann, Columbia University/Biosphere 2 (President); Dennis Schatz, Pacific Science Center (Vice President); Eugene Epstein, The Aerospace Corporation, (ret) (Treasurer); Mary Kay Hemenway, University of Texas, Austin (Secretary); Sandi Billings, Palouse Discovery Science Center; John C. Diebel, Meade Instruments Corporation (ret); Julieta Fierro, Instituto de Astronomica, UNAM; David Levy, Jarnac Observatory; Karen J. Meech, University of Hawai'i; George D. Nelson, Western Washington University; Bruce Partridge, Haverford College; and Leif J. Robinson, Editor Emeritus, *Sky and Telescope*.

Astrophysical Activities continued from page 16

Visiting Researchers: the KITP Scholars - The purpose of this program is to support the research efforts of faculty at U.S. colleges and universities that are not major research institutions. Applicants from non-Ph.D.-granting institutions and from institutions with greater emphasis on teaching (as measured, for example, by teaching load) are particularly encouraged to apply. Active theorists at national labs with large programmatic responsibilities are also encouraged to apply. Ongoing research activity is an important criterion. Each award funds a total of three round trips and up to six weeks of local expenses, to be used over a period of three years. See <http://www.kitp.ucsb.edu/activities/scholars/> for further information.

Updated Directory for 2004

One of the benefits of AAS membership is a yearly copy of the *Directory*. The *Directory* is a comprehensive listing of both the members of the AAS and the institutions worldwide that carry out or support astronomical research. This year significant effort has been made to enhance the US and international institutional listings. To date, nearly 300 international institutions have provided updated contact information and slightly more than 300 US institutions have as well. The AAS seeks to constantly improve our *Directory* and asks that all institutions check their listing and forward any corrections or changes to address@aes.org.

The *Directory* is shipping Third Class at the end of November. If your institution mail room has a policy of discarding Third Class Mail, please ask them to make an exception for the AAS *Directory* that will arrive in clear shrink-wrap. We cannot replace free of charge *Directories* that have been discarded by Members' institutions. If you have not received your *Directory* by January, contact Shantice Jones at aas@aes.org.

Additional copies for yourself or support staff are available for \$25. Download the *Directory* order form online at www.aas.org/forms/dirform.pdf.

Look for delivery of the new 2004 *Directory* in December.

Washington News continued from back page

Of the total for AST, facilities support received \$109.20 million (including both Gemini support and the Telescope System Instrumentation Program a.k.a. TSIP). The Research and Instrumentation efforts of AST received \$77.65 million, including support of the Adaptive Optics Development Program, which represents NSF's initial technology development efforts for the Giant Segmented Mirror Telescope. GSMT is the number one priority for ground-based initiatives in the Decadal Survey (the AAS maintains a Decadal Survey Advocacy page, which provides links to the Astronomy and Astrophysics survey as well as the recently released Planetary and Solar decadal surveys at: www.aas.org/policy/DecadalAdvocacy.html).

NSF also funds astronomy through the Office of Polar Programs (\$6.7 million in FY03 and \$24.7 million on the Ice Cube Neutrino telescope) and the Atmospheric division of the Geosciences Directorate could receive between \$6.7 million and \$7.5 million.

NASA received a total budget for FY03 of \$15.335 billion, an increase of only 2.2% over the President's requested level a trend that continued for the Office of Space Science, which received \$3.5 billion, an increase of only 2.5% over the President's request. However, when compared to its FY02 level, OSS received an increase of 20.7%. Although some of this increase is due to programmatic transfers (e.g. DSN), at least 13% of this increase represents increased funding available to research. The largest Congressional addition was \$95 million for the Pluto-Kuiper Belt mission, a program NASA originally proposed to cancel. Other increases include \$20 million for the Jupiter Icy Moons Orbiter and \$19 million for Mars Exploration.

The continued success of Astronomy research in the appropriations process is due to the interested participation of AAS members and others. Be sure to write to your member of Congress thanking them for the funding to NSF and NASA and asking their continued support of basic research.

Other areas of the budget are becoming important for astrophysical research, including both the Department of Energy's Office of Science and the ongoing support of the Smithsonian Institution, the Department of Defense. As these funding sources grow or come under threat, I will attempt to present relevant information to the AAS membership to enable advocacy efforts.

HST-JWST Transition Report

The HST-JWST Transition panel, chaired by former AAS President John Bahcall, released their much anticipated report on August 14. The report (available in full online at: http://www.nasa.gov/pdf/49151main_hst-jwst.pdf) provides NASA with three prioritized options for the future of the HST. The first, is to provide two servicing missions to extend HST's scientific productivity, competing the SM5 servicing mission concepts through peer-review. The second option is to provide just one servicing mission, to take place before the end of 2006 and

de-orbiting the spacecraft when science operations are no longer possible. The final option if no servicing missions were possible was to use a robotic mission to install a de-orbiting propulsion module in controlled descent.

The AAS has released an endorsement of the report (<http://www.aas.org/policy/FY2004Budget.html>) and NASA has released a summary of their response to the report. Both were distributed to AAS members in the form of an AAS Informational email in September.

Intelligent Design on the Rise

Several impending actions regarding science curricula and book content in our Nation's schools will become flashpoints this fall for an ongoing battle between those who wish to alter basic science curricula to include non-scientific content and those who wish science class to teach science.

The first of these actions, the approval of science curricula by the New Mexico State Board of Education will hopefully have been concluded by early September. An Action Alert (AA 2003-04) was sent to AAS members in New Mexico informing them of how to make their opinions known to the department of education and the details of the issue. In short, a small group of individuals who insist on including so-called "Intelligent Design" (a cover name for discrediting Evolution as a concept) concepts in science curricula in New Mexico Schools. Reports in the media and actions by science teachers in the state have managed to sway public opinion against the ID organization and it is likely that the science standards, as developed over a two-year period with input from numerous experts and through an open discussion method, will be approved.

LATE BREAKING RESULT: As this issue goes to press, the AAS has learned that the New Mexico State Board of Education approved the State Science standards without amendments on Thursday, August 28. The vote for approval was 13 to 0. According to press reports, the board members were swamped with letters, some receiving more than 300 letters on this issue from New Mexico and beyond. New Mexico AAS members who wrote letters should be congratulated for helping preserve the science classrooms of New Mexico for science. A small amount of effort by our members can have a significant impact. The session concluded with board member Eleanor Ortiz of Santa Fe saying, "I just want to commend the scientists in the audience. They have evolved into very nice people."

The second action is the selection of science textbooks by the Texas State Board of Education, which meets on 11-12 September and also on 6-7 November. The final decisions on textbooks are normally made at the November meeting of the Board. The process for adoption of textbooks is available online (<http://www.tea.state.tx.us/textbooks/adoptprocess/index.html>). It is expected that the ID movement will lead a letter writing campaign to modify the content of textbooks that present evolution, geologic time as derived from scientific principles and the

continued on next page

creation of the Universe as we understand it. For a sample of the comments submitted the last time this issue was discussed by the board see <http://www.tea.state.tx.us/textbooks/adoptprocess/july03handouts.pdf>.

The ID movement outlines their fundamental goals on their national web page:

Governing Goals

- ? To defeat scientific materialism and its destructive moral, cultural and political legacies.
- ? To replace materialistic explanations with the theistic understanding that nature and human beings are created by God.

Twenty Year Goals

- ? To see intelligent design theory as the dominant perspective in science.
- ? To see design theory application in specific fields, including molecular biology, biochemistry, paleontology, physics and cosmology in the natural sciences, psychology, ethics, politics, theology and philosophy in the humanities; to see its influence in the fine arts.
- ? To see design theory permeate our religious, cultural, moral and political life.

When the ID movement's activities stand in contradiction to AAS Resolutions (archived on the AAS website at www.aas.org/governance/council/resolutions.html) such as "On Creationism" or "On the Teaching of the History of the Universe", the AAS will take direct action, either through mobilizing a grassroots effort or by partnering with other scientific organizations to undertake some group action. As always, we welcome member input on any public policy issue, either to the AAS Executive Office (e.g. marvel@aaas.org) or to your elected representatives, the officers and councilors of the AAS.

Poster Portraits

You've gone through the time and trouble to print your research work on a high-quality color poster, why not include your picture? Including your picture on your AAS poster allows your colleagues to identify you at other times during the meeting or after your poster has been taken down. The AAS encourages all poster presenters to include at least their contact information in some kind of take-away format and recommends including a photo of yourself or your collaborators on the poster itself to foster interaction and discussion at the meeting.

The 2002 Chrétien Awards to Andrievsky and Christlieb

In October of last year two Chrétien grants were awarded to Norbert Christlieb of the Universität Hamburg and Sergei Andrievsky of Odessa State University. The Chrétien grants foster international collaborations and the 2002 award winners are shining examples of this goal.

Dr. Christlieb has been working with Judy Cohen of Caltech on a project to increase the number of known extremely metal-poor stars by a factor of at least three. If successful, this project will result in nearly 300 known stars with extremely low metallicity. Using the HIRES spectrograph on the Keck I telescope and the Echelle spectrograph on the Magellan 1 telescope, the team will gather the necessary spectra for candidate stars and subsequently obtain stellar metallicities. Their candidate lists were developed using innovative automatic spectral classification methods applied to existing spectral databases.

Dr. Andrievsky has been working with R. Earle Luck of Case Western Reserve University to observe Cepheids in the outer regions of the galactic disk in order to map abundance gradients. Radial abundance gradients in spiral galaxies have been an exciting area of research in recent years and the team will use in-hand spectra to provide the most reliable abundance gradients for 25 chemical elements from 4 kpc to 14 kpc based on a statistically significant sample of about 100 Cepheid variables. Of great interest is the investigation of the Galaxy's morphological structures (e.g. the bar) that can be traced using the determined abundance gradients.

The Chrétien grant program, established to honor the memory of Henri Chrétien, welcomes applications from any astronomer to support long-term visits that develop close working relationships with astronomers in other countries. Full details are available on the AAS grants web page: www.aas.org/grants.



AAS Vice-President Joe Burns of Cornell University presents the 2004 AAS-AMS-APS Public Service Award to Representative Sherwood Boehlert (R-NY), Chairman of the House Science Committee. The award—made of etched crystal and granite—weighs about fifteen pounds, which surprises many of the recipients.



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Washington News

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The End of Summer

With the heat of summer being beaten down by frequent thunderstorms, the policy community is slowly beginning to return to Washington, DC in preparation for an exciting fall politics season. The news was filled with international events and the California recall-election-to-be, but Astronomy managed to get some attention with the release of a recommendation report on the future of the HST and transition to the JWST. In other news, the operating plan for FY03 finally became available in mid-summer, just a few months before the conclusion of the fiscal year. Finally, in events across the country, the Intelligent Design movement appears to be mounting a significant effort this year to impact schools in our Nation.

Although AAS public policy efforts are focused mainly on issues that directly impact astronomy (e.g. appropriations for NASA and NSF), other issues of concern to our members are tracked and influenced when possible. If you have an issue of concern that you think the AAS should be involved in, please contact me directly (marvel@aaas.org). Chances are we are tracking the issue and simply waiting for member input to contemplate action of some sort.

Operating Plan Released

The Operating Plan, a sort of working budget document that is ultimately negotiated between Congressional appropriations staff and agency budget mavens was finally made available in mid-summer. Details will soon be published in *Public Policy Brief 6, Astronomy in the Congressional FY 2003 Budget* and mailed directly to all US AAS members.

The delay in its release came mainly from the fact that Congress did not negotiate the final budget details with the President until February of 2003, nearly six months after the beginning of the true fiscal year.

NSF Astronomy (AST) fared well in the FY 2003 budget, receiving \$186.85 million from Congress, an increase of 15.8% from the President's requested level of 161.25. This dramatic increase is due in large part to the work of Senators Christopher Bond (R-MO) Barbara Mikulski (D-MD) who have undertaken the goal of doubling the NSF budget in six years. The AAS continues to work with other scientific societies to ensure that this effort is completed.

continued on page 18