# **AAS Newsletter**

A Publication for the members of the American Astronomical Society

the U.S.

May/June 2010, Issue 152

### CONTENTS

## **President's Column**

John Huchra, president@aas.org

### 2

From the **Executive Office** 

25 Things About...

### 4

Journals Update

### 5

Division News

### 6

IAU General Assembly

### 10

Announcements

Washington News



As my two years as President are coming to a close, I want to reflect a bit on the Society's activities over those years and prognosticate a bit about the future of the Society and about astronomy in

3

### **Back page**

First the history. The Society (you!) has adopted mission and vision statements (not as simple a task as one might think) that describe our broad goals and serve as a mechanism to prioritize our activities. We are almost through the transition started by my predecessors to a new publisher for our journals. Transition has had a few bumps but has produced cost savings, and the fairly stable subscription costs and page charges at a time when other journals prices have substantially increased. Our journals are the best in the world, and are published very rapidly. We also expect to transition to electronic only publishing with a print on demand option for those dinosaurs (like me!) that still read the printed word on paper; *ApJ Letters* is already there.

We have adopted a professional code of ethics. We are about to conclude a strategic planning effort. The strategic plan will identify the activities necessary and important to achieve the Society's goals and at the same time keep us running in the black (thanks be to Kevin Marvel). We have set up a Demographics Committee composed of members of the Committees on the Status of Women in Astronomy, on Minorities in Astronomy and the Employment Committee and they should soon begin collecting membership data for long term longitudinal studies of who we are, what we do and where and how we work.

The Society has also become more proactive for astronomy in the circles of governmentmaintaining responsible guidelines for those activities. Our Bahcall public policy fellows have helped tremendously in this effort and I urge you all to visit the AAS policy blog and the CAPP page and see what we are doing. Finally the Society has worked hard to identify the benefits of AAS membership. Societies like the AAS work best when we can include and represent the views of the whole community.

I also want to remind everyone of the new deadline for unsolicited nominations for AAS Prizes is 30 June. This was adopted by the Council to allow people/departments to work on their nominations before the end of the school year and also give our prize committees more time to do their work. The AAS has also been given additional resources specifically to create new awards, some of which we will use to provide travel support for students (the new Rodger Doxsey Travel Award). Please nominate! AAS awards range from the Warner and Pierce Prizes for early career astronomers to the Russell Lectureship for career contributions to the field, and cover activities that include research, instrumentation, societal and educational contributions. We are working to make the process as easy as possible. Recognition by one's peers is an important part of the career process, and I can tell you from personal experience that there are few professional pleasures as heartwarming as nominating someone or some group for an award and seeing them win.

Another reminder that the Decadal Survey is coming in September. The Committee is trying to ensure that the agencies and OMB and OSTP see and digest the report before they assemble the FY2012 President's budget, a process that consumes much of the fall and winter before it rolls out to Congress in February. We will need your help in both explaining it and selling it to Congress

#### **AAS Officers**

John P. Huchra, President Debra M. Elmegreen, President-Elect Lee W. Hartmann, Vice-President Christine Jones, Vice-President Lee Anne Willson, Vice-President Hervey (Peter) Stockman, Treasurer John A. Graham, Secretary Richard F. Green, Pub Board Chair Timothy F. Slater, Education Officer Richard Fienberg, Press Officer & Education Outreach Coordinator

#### Councilors

Richard G. French Chryssa Kouveliotou James D. Lowenthal Felix J. Lockman Nancy Morrison Nicholas B. Suntzeff C. Megan Urry Charles E. Woodward Jennifer Wiseman

#### **Executive Office Staff**

Kevin B. Marvel, Executive Officer Tracy Beale, Membership Services Administrator Chris Biemesderfer, Director of Publishing Roger Bilinda, Web Applications Developer Laronda Boyce, Meetings & Exhibits Coordinator Lisa Brown, Financial Assistant Kelly E. Clark, Chief Financial Officer Scott Garvey, Administrative Assistant Lisa Idem, Meetings Assistant Scott Idem, Systems & Network Manager Judith M. Johnson, Managing Editor AER & BAAS Anita Krishnamurthi, Bahcall Public Policy Fellow Kara North, Meetings Assistant Faye C. Peterson, Manager, Membership Services Crystal M. Tinch, Communications & Development Specialist

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

The \$141.00 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 Ave, 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@aas.org. Appropriate pictures are welcome. For information about deadlines and submitting articles, see www.aas.org/ publications/newsletter.php. Items submitted to the AAS Newsletter are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to crystal@aas.org.

Judith M. Johnson, Editor Crystal M. Tinch, Associate Editor Jeff Linsky, U. Colorado, Associate Editor, Letters

### **From the Executive Office**

Kevin B. Marvel, Executive Officer, marvel@aas.org

We are gearing up for the big Miami AAS meeting in the Executive Office, which normally means lots of interaction with special session proposers, handling numerous contracts and crossing our fingers that we meet our room block minimums and registration targets. This year our spring/summer meeting (I prefer calling it summer, some prefer spring) will be held in Miami and our Solar Physics Division (SPD) will be meeting with us jointly.

Your elected vice-presidents, Lee Hartmann, Christine Jones and Lee Anne Willson worked closely with representatives of the SPD to ensure a close-knit and synergistic meeting. Solar and stellar special sessions and invited speakers will augment and enhance each other. The SPD is going out of their way to provide introductory lectures at the start of many of their sessions to introduce our current understanding of the Sun to those of us with a bent toward more distant stars and galaxies. I hope that everyone will look carefully at the meeting program and consider attending. I think the meeting will truly be scientifically exciting. Besides, Miami, with its tropical climate and multicultural cuisines will offer plenty of opportunities for collegial interactions after hours (not to mention the tasty cocktails!).

We are already in the early stages of planning for the IAU General Assembly hosted by the U.S. in Honolulu for 2015, and met recently with key members of the University of Hawaii's Institute for Astronomy to begin working out our shared responsibilities. I can say that both the AAS and the IfA are excited to be hosting this important international meeting. The AAS will handle the logistics and finances while IfA will provide the local flavor so necessary for a successful General Assembly.

Estimating attendance for this meeting will be tricky. The combination of location, scientific importance, ease of access to pan-Pacific astronomers and the opportunity to tour the many telescopes based in Hawaii are likely to ensure record-setting attendance at the General Assembly, as did our most recent winter meeting in DC.

We are also wrapping up our budget process for 2011 at the Executive Office with the goal of keeping price increases as low as possible while ensuring we have the resources available to meet the goals Council has set for the AAS. This is a challenging process, I can assure you. The non-profit mantra of the AAS guides our thinking, efforts and shared pocketbook. Bear with us when prices creep upward. Be assured that increases are only proposed to Council when necessary to provide the services needed to move Astronomy forward.

I continue to receive positive comments about the speed of publication of our journals. Many people have been impressed by both the smooth transition of our journals to IOP from UCP (complete as of January last year) and the improved speed from acceptance to publication. It is not inconceivable that we could break the two-week barrier from submission to publication for ApJL in the coming year. The dominant delay currently in the publication process is the response time of authors to referee changes. This is exactly where we need to be in the modern publishing arena. Only *you* can ensure the rapid publication of your paper!

It should be easy and transparent to submit fully-digital content, referecing responses should be rapid and publication times very short. We continue to work toward better performance and ease of use and we hope that authors will be sure to let us know (either myself, Chris Biemesderfer, our Director of Publishing or the editors of our journals) if you encounter any problems. Getting early warning on possible problem areas will help us improve our publishing process and thereby scientific progress. Help us help our discipline by letting us know quickly if you have problems (and don't be shy telling us when things are working well, either!).

### **President's Column** continued from front page

if there is to be any hope of maintaining a reasonable level of support for astronomical research and facilities. Astronomy is in a golden age with spectacular discoveries such as the first extrasolar planets, pinning down the age of the Universe, dark energy, galactic black holes, and galaxies formed only a few hundred million years after the Big Bang as just some of the drivers for new questions. Yet there is much work to do. The next decades will bring incredible facilities and improved abilities including computational resources to drive our field even further. Astronomers and astrophysicists are forging closer links to physicists, biologists, chemists, statisticians and computer scientists, just to name a few fields, and astronomy is now even more of an international discipline. Whatever else happens, we are privileged to be a part of this enterprise.

I want to urge everyone attending our "summer" meeting in Miami to have a good time! Treat each other with the proper professional respect, get your science out and enjoy the venue. Lastly, I want to thank all the members of the Society, the AAS Council, our various Committees and the staff of the Executive Office, especially Kevin Marvel, for making my term interesting and enjoyable. I owe a debt to my predecessors, especially J. Craig Wheeler, and to my successor, Debbie Elmegreen for advice, consent and lots of hard work. Thanks for letting me serve as your President!

### Secretary's Corner

### **AAS Prizes**

Nominate someone for a prize this year! To be considered for an AAS prize, a person must be formally nominated. However, the nomination procedure, which can be viewed at the AAS website, is not arduous.

In recent years, the AAS prize committees have often noted the small slate of worthy candidates from whom they may choose. This particularly applies to the junior prizes. Bear in mind that it is not only the monetary amount but also the honor and distinction that can mean so much to a young astronomer's career. The award of a prize also adds luster to her/his department of institution in the eyes of the academic community.

Nominations and letters of support must be received in the Secretary's office by **30 June 2010**. Shortly after that date, they are distributed to the several prize committees so that late submissions cannot be accommodated.

### 25 Things about...incoming AAS Secretary Fritz Benedict

- 1. My favorite celebrity as a child was: Annette Funicello.
- 2. My favorite ice cream is: Chocolate.
- **3. Is it easier to forgive or forget**: Forget, at my age.
- 4. I sleep with my closet doors open or closed: Closed.
- **5.** When I get home, I like to wear: Winter what I wear to work. The rest of the time shorts and tee shirt.

6. The most important thing I learned from my mother was: To appreciate diversity.

7. The most important thing I learned from my father was: Have a job you love.

**8. Where do you want to retire:** Should that unfortunate state of affairs come to pass, my house.

9. My favorite color is: Blue.

**10. The last book I read was:** The series "The Book of the New Sun" by Gene Wolfe.

- 11. My favorite sport is: Sailing.
- 12. My first real job was: Warehouse restocker.

**13. My motto is:** In the upper right corner of my home page, http://www.as.utexas.edu/~fritz/

- 14. I make the best: Frozen Margaritas.
- 15. I was born in: Bellflower, California.
- 16. My favorite place to travel: The Big Island of Hawaii.
- 17. My favorite animal is: My dog.
- 18. My name means: The canticle sung at Lauds.
- 19. My dream car is: Porche 911 Carrara S.

20. My favorite city is:

San Francisco.

21. My favorite actress is:

Charlize Theron. 22. My favorite athlete is: Dennis Conner.

23. I used to play: Snooker.

24. I like my coffee: Black and, alas, decaffeinated.25. I love to: Have evenings with my extended family.



### **Journals Update**

Chris Biemesderfer, Director of Publishing, Chris.Biemesderfer@aas.org

We are now well into 2010, and the AAS journals program continues to evolve. Several important changes have already taken place this year, and a number of others are slated for later in the year. Before I get to the discrete items, I want to mention that the processing times for AJ and ApJ manuscripts are all quite good, and the production times for accepted manuscripts are exceptional. The AJ, ApJ, and ApJS are routinely published online within 30 days of acceptance; ApJL manuscripts appear less than three weeks after acceptance. This is a credit to the skill and attention of our publisher, IOP Publishing. In July, we will reach the third anniversary of the Society's relationship with IOP.

Astronomy Education Review (AER) has a new editor as of 2010. Professor Thomas Hockey, who is on the faculty at the University of Northern Iowa and who is known to many of you already through his work with HAD, assumed editorial responsibilities in January. Dr. Hockey is a respected educator, and he brings a commitment to the journal's purpose along with innovative ideas for its continued evolution.

Throughout the spring and summer, the ApJ and AJ editorial offices will be moving the online submission and peer review management functions to a different system. The new environment is provided by a company called eJournalPress, who was selected last summer at the conclusion of a comprehensive evaluation process. You should be aware that a committee of eleven people worked very hard and expediently on your behalf in an effort to find the best system for the journals' needs. The editors and managing editors are excited to start using the new system, and we all hope that it will allow the editorial offices to handle peer review a little faster, resulting in a further decrease of the processing times for author's manuscripts.

All of our journals migrate to new content delivery platforms in 2010. The AJ and the ApJ are already available on IOPscience, IOP's latest generation web delivery platform. In IOPscience, the journals have a flexible modern framework as a base, one that we can use more easily to offer innovative article-oriented services. In the fall, AER will migrate onto AIP's enhanced delivery platform, called C<sup>3</sup>. It will provide an equally modern basis for AER.

A variety of other enhancements and projects are coming this year. These include the availability of AAS journal content on mobile (notably the iPhone) applications, as well as the ability to present Chinese, Japanese, and Korean author names using CJK characters. All the major astronomy journals began to use updated keywords (subject headings) at the beginning of 2010. For the past several months, our editors have been able to use the CrossCheck service to check for duplicate submissions and to research potential instances of plagiarism. AAS leadership has asked the Society's program to engage in overall strategic planning, and the journals program has contributed its strategic objectives and will remain involved in the exercise.

Significant changes are in the works for 2011. We anticipate switching to an article numbering system for identifying articles, and we plan to introduce author fees predicated on the digital components of articles rather than the number of typeset pages. Of course, we hope to continue making the journals richer resources through the inclusion of more data with published articles. I will talk about these changes in future *AAS Newsletter* articles.

### New "Discoveries in Planetary Science" Classroom PowerPoints Available

The DPS Education Subcommittee announces the 3rd release of "Discoveries in Planetary Science" Classroom Powerpoints, covering five new topics:

- Venus' Active Volcanism
- Martian Glaciers
- Titan Lakes
- Explaining Iapetus
- Waterworld at 40 Lightyears?

These are succinct summaries of discoveries too recent to appear in "Intro Astronomy" college textbooks; each set consists of just three slides to be shown: the discovery itself, a basic explanation based on good planetary science, and the "big picture" context. Another page for further information is provided as well. Powerpoints and pdfs can be downloaded from http://dps.aas.org/education/dpsdisc.

Feedback from the community on how these slide sets are used and received is welcomed, and will be used to improve future releases. Planetary scientists with recent or upcoming results of broad interest are encouraged to submit them for consideration by providing an initial draft using the template provided on the website. For more information, contact Nick Schneider and Dave Brain at dpsdisc@aas.org

### **Division News**

### **Historical Astronomy Division (HAD)**

Joseph S. Tenn, Secretary-Treasurer, joe.tenn@sonoma.edu



Last year the Historical Astronomy Division (HAD) announced the world's first book prize for a book on the history of astronomy. The HAD Prize Committee is currently reading the thirteen books nominated for the first prize in preparation for a decision this summer. When the first prize is awarded at the AAS/HAD meeting in January 2011 it will be named the Donald E. Osterbrock Book Prize. The HAD Committee agreed to name it in memory of the distinguished astronomer, author, long-time HAD member, past chair, and recipient of the LeRoy E. Doggett Prize for lifetime achievement in the history of astronomy. The naming was initially contingent on raising a minimum of \$10,000. A small number of Osterbrock friends and admirers were solicited in February, and the minimum

was soon pledged. Funding will be used to bring prize recipients to the meetings where they will be presented with the prize and invited to give a lecture.

Now HAD is asking the wider community of those who knew and/or admired Don Osterbrock to contribute. The HAD Committee hopes to raise sufficient funds to make the prize self-sustaining.

To contribute you may log in at members.aas.org. Then click on "Donate Now" in the column on the left. Go down the page to Historical Astronomy Division and fill in the amount and, when asked, your credit card number or send a check made out to the:

American Astronomical Society 2000 Florida Ave., NW, Suite 400 Washington, DC 20009-1231, USA and indicate that it is a donation to the HAD Osterbrock Fund #2942.

Photo credit: University of California, Santa Cruz, Regents of University of California

# 2010 Henry Norris Russell Lecturer Margaret Geller

Due to a layout error, the photo of the 2010 Henry Norris Russell Lecturer, Margaret Geller, was inadvertently cropped. We reprint the photo here in its uncropped form and also point out that Geller's Russell lecture will be held at the summer 2011 AAS meeting in Boston instead of at the winter meeting. The AAS will record the lecture and make it available to members online shortly after the meeting, yet attending in person will ensure the best experience.



### **Member Deaths**

The Society is saddened to learn of the deaths of the following members, former members and affiliate members:

Kenneth L. Cashdollar Harry W. Fulbright Father Martin F. McCarthy Michael E. Van Steenberg

### Letters to the Editor

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.

### Opting In and Out of AAS Publications

If you would no longer like to receive paper copies of the AAS Newsletter, the AAS Membership Directory, or the AAS Calendar, please send an email to address@aas.org or log into your member record at aas.org.

To unsubscribe from AAS emails, contact address@aas.org

For address changes, email address@aas.org

### Coming to the U.S. – the IAU General Assembly!

Edward Guinan and Kathie Bailey Mathae

Honolulu, Hawaii will be the site of the International Astronomical Union's General Assembly in 2015. Several factors were involved in this decision. First, the AAS will be helping to organize the meeting and, as AAS members know, AAS knows how to run big meetings. Second, astronomers from other countries want to interact with American astronomers. Third, international astronomers are interested in going to Hawaii because of the state's well known tourist attractions including the many large telescopes located there. Fourth, the last IAU General Assembly held in the United States was in Baltimore, MD in 1988. Let's show the world that the decision to return to the United States was the right one!

### **Astronomy for the Developing World**

The International Astronomical Union (IAU) is embarking on an ambitious new plan designed to expand astronomy development programs over the next decade. The strategic plan, Astronomy for the Developing World, was approved at the IAU General Assembly last August and is available at http:// iau.org/static/education/strategicplan\_091001.pdf. The plan builds on the success of current IAU education, teaching and outreach programs (Commission 46) and the great success of the International Year of Astronomy. It features an integrated strategic approach based on the future potential in the country; enlarging the number of active volunteers; initiation of new activities (lectureships, endowments, twinning, etc.); creation of small Global Development Office (coordinate, avoid duplication of efforts, and fundraise); increasing regional involvement; and exploiting new tools. Because of the relative underdevelopment, sub-Saharan Africa will receive special attention.

IAU will seek to enlarge the number of active volunteers by recruiting more members and augmenting the pool of volunteers of doctoral and post-doc trainees and talented non-member experts on elementary education and public outreach. Your help will be needed!

### **Report from the IAU General Assembly in Brazil**

The IAU XXVII General Assembly (GA) was held in Rio de Janeiro, Brazil from 3-14 August, 2009. Over 2,100 people from over 45 countries attended, including over 350 astronomers from the United States. Nearly one hundred of the U.S. astronomers were supported by AAS/NSF Travel Grants. This GA was special in that it coincided with the celebration of the International Year of Astronomy (IYA) and the 400th anniversary of the first astronomical observation using a telescope by Galileo Galilei. The General Assembly also celebrated the 90th anniversary of the establishment of the IAU.

A very interesting and varied scientific program was offered. Six Symposia and 26 Joint Discussions and Special Sessions covering a wide variety of topics in contemporary astrophysics were held. There were also three Invited Discourses, supplemented by a special presentation on Galileo and by lectures by recipients of the Gruber cosmology prize.

- Elections: Bob Williams was elected IAU President for the next triennium, and Martha Haynes was reelected as Vice President. Kevin Marvel will continue to serve on the Finance Committee, and Sally Heap was appointed to the New Standing Nominating Committee. Ed Guinan and Larry Marschall will serve as Co-Chairs of the IAU Program Teaching Astronomy for Development program.
- U.S.-Sponsored Events: The U.S. contributed to three events at the General Assembly: the Young Astronomers Workshop and Luncheon, the Women Astronomers Luncheon, and the U.S. reception.

#### **Women's Luncheon**

Sponsored by the U.S. National Committee for the IAU (USNC/IAU) through a grant from the National Science Foundation, the third Women in Astronomy Luncheon was again a great success. Organized by the Women Astronomers Working Group (WAWG), and in particular Anne Green, Sarah Maddison and Miriani Pastoriza, the 10 August luncheon attracted a full capacity crowd of 240 people. The geographical distribution ranged from large, developed countries to developing countries. Over 90 percent of participants were women.

### **Young Astronomer Activities**

The IAU General Assembly features several activities geared especially to young astronomers. Sponsored by the USNC/ IAU through a grant from the National Science Foundation, the most popular was the Young Astronomers workshop luncheon. A regularly over-subscribed event at IAU General Assemblies, the luncheon this year was organized by Jean-Pierre De Greve. K-C Leung (University of Nebraska) and Edward Guinan (Villanova University) assisted Dr. De Greve in the organization of the lunch, particularly in the selection of participants and the discussion topics.

Attended by about 170 people, the Young Astronomers luncheon featured roundtable discussions involving 1-2 senior astronomers and 8-9 young astronomers. Discussions focused on career paths, research funding, successful job strategies, fellowships opportunities. The future of astronomy in different countries and job prospects in the U.S. were also discussed. A questionnaire was completed by the participants at the end of the event. Almost all attendees considered the event a success and recommended that a similar event be offered at the 2012 GA.

#### **United States Reception**

The USNC/IAU sponsored a U.S. Reception during the 2009 General Assembly. Funded through private funds and held at the Planeta'rio da Cidade do Rio de Janeiro on the evening of 6 August, the event was attended by about 120 people. The reception provided an opportunity for members of the USNC/IAU to meet and talk with current and incoming officers of the IAU, leaders of various astronomical societies, government officials, the local organizing committee, and astronomers from many countries.

### **Committee on Employment**

Liam McDaid (McDaidL@scc.losrios.edu)

### **Astronomers Working in Public Outreach**

Some claims have been made lately that many astronomy students are sold sunshine and rainbows when it comes to a career in this field. Some even claim that our production of PhDs is a "pyramid scheme." When examined, however, the record is clear. There simply aren't huge numbers of unemployed PhD astronomers. Whether they are all working in a job related to astronomy is another–respectably heated– matter. It still seems that choosing a career in astronomy always involves big compromises.

A recent development has been the growth of Education & Public Outreach (E/PO) positions. NASA supports some of these, and lately colleges and universities are also creating these positions. How these jobs are structured varies. The oldest versions had responsibilities involving observatory support or running planetariums. They were often connected to a science museum or planetarium such as the Fels Planetarium at the Franklin Institute. With the plummeting costs of quality imaging and spectroscopic equipment, new prospects have arisen. It is possible to do original research in an undergraduate class for less than \$25,000 if your college already has an observatory (in a dark sky site, of course).

After contemplating how many years I would be poor and frustrated otherwise, I sought a job teaching at a community college. Generally, although your mileage may vary, an MS is all that is required for such positions. In the past, it seemed almost that having a PhD counted against you in that you were viewed as a "flight risk" to a "real" job. That no longer seems to be true. Given the present economy, this is good news, and such positions are rather plentiful. Also, no soft money is involved and future funding is pretty stable once you have your foot in the door. The bad news is that not every college has the resources to support your research...which is something you will be doing in your spare time. Surprisingly, some of my colleagues at community colleges actually do research. They have an affiliation with another institution for support, however.

My own job is partly (53%) as an astronomy coordinator. The remainder of my time is spent teaching. As astronomy coordinator, I oversee maintenance on our observatory, develop new projects for classes, procure needed equipment, function as an astronomy media contact for my area, run the observatory for our very popular public viewings, go on location to dark sky star parties for our students, create curricula for astronomy classes, act as liaison with both local and regional groups on E/PO projects and explain the process of science to crowds both enthusiastic (astrophiles) and hostile (creationists).

While that last bit may not be to everyone's taste, I feel it is vital to get the message of science to as many people as possible

-the same people that pay for all the NSF grants, NASA grants, and that infamous soft money. As a result, I often find myself dealing with issues that many astronomers would rather avoid or wish were not issues. When not answering questions about December 2012 for members of the public frightened by the apocalypse-industrial complex, I patiently explain why Pluto is no longer considered a planet (often a more controversial subject). I do no research, although that would be an option for me if I wished. For all the trouble my job sometimes pulls me into, it's never boring.

A common theme that may be noticed in talking to people who have "untraditional" astronomy careers is the idea of creating your own job. This is often very true. My job was clearly defined on paper, yet many things had to be altered or hammered out in the course of actually doing the job. There is a certain freedom in this, but for some this prospect may seem disturbing. I fear, however, that we are at a point where the traditional path is tread by fewer and fewer feet while the majority of astronomy graduates walk through different forests. There is no reason to think this will change, yet the language is still tilted toward a non-university career as being exceptional (unfortunately, said language is often salted with vague negative connotations).

The prominence of and often public respect for people in E/PO positions has grown as well. Phil Plait, until recently president of the nonprofit James Randi Educational Foundation started out in an E/PO position for GLAST while working on his first book and blog. He is now working on a TV project. Neil deGrasse Tyson also does E/PO as the director of the Hayden Planetarium, and has an impressive media profile. For people who have a passion for sharing the universe with everyone, this is a great career and in the age of 1000 channels and a billion websites it is likely the closest thing one can do to follow in the astronomy outreach footsteps of the late Carl Sagan.

To find jobs in this growing field, two good sources are the AAS Job Register: http://members.aas.org/JobReg/(usually under "Other") and the ATSC Job Bank: http://www.astc. org/profdev/jobs/jobs.htm.

The AAS Committee on Employment is pleased to highlight useful resources for astronomers, and welcomes your comments and responses to this and previous columns. Check out our website (www.aas.org/career/) for additional resources and contact information for the committee members. If you are working in a "non-traditional" career path and would like to contribute an article or have an idea to this column, please contact the Employment Column Editor, Liam McDaid (mcdaidl@scc.losrios.edu).

### News from the Astronomical Society of the Pacific (ASP)

James Manning, Executive Director

### Connections

A hidden connection is stronger than an obvious one. -Heraclitus of Ephesus

It is the nature of science—and scientists—to look for connections. Causes and effects, relationships among entities, the ordering of phenomena, extrapolations of data, predictions based on behavior. All in a day's work, right? As we wring Mother Nature and the universe of their secrets.

But do we also consider the connections between science and the public? Between the sciences themselves in an age of rampant specialization? Between ill-prepared teachers and poor science test results from students, and even poorer aspirations to science careers? Are we making the connections we need to make to encourage greater science literacy in the wider world?

As Carl Sagan wrote in The Demon-Haunted World, "We've arranged a global civilization in which most crucial elements profoundly depend on science and technology. We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces." We need only observe the specter of "2012" to understand what he was talking about. (Not the nonexistent planetary dangers purportedly anticipated by the ancient Mayans at the end of a calendar, but rather our collective failure to raise a population of critical thinkers capable of separating fact from fiction.)

We seem increasingly to live in age of disconnection—from the world, from the practice of civility and reason, from each other, and certainly from science—with the innovative tools of our electronic age (like the Internet) employed (ironically and often) seemingly more to keep us apart than to bring us together.

This is a problem. So what are we going to do about it?

Well, for starters, why don't we work to make more good connections among ourselves and the public that ultimately funds our work?

Putting our "money where our mouth is," the Astronomical Society of the Pacific (ASP) is offering just such an opportunity in our annual meeting for this year—a national summer meeting in Boulder, Colorado, (on the University of Colorado campus) in partnership with the Geological Society of America (GSA). The meeting runs 1-4 August, and you can learn all about it at www.astrosociety.org/events/meeting.html. There will be an education and public outreach (EPO) symposium whose theme is "Earth and Space Science: Making Connections in Education and Public Outreach." The goal is first, to connect with each other—astronomy and space science and Earth science and geoscience and other science professionals—to share our collective wisdom and experience, learn from that of others, and seek ways to collaborate on and integrate what we're doing in education and public outreach. And second, to seek innovative avenues, working together, to connect with the public and our schools in new and impactful ways.

As a bonus, the ASP is also conducting simultaneously its every-three-years "Cosmos in the Classroom" symposium, gathering introductory astronomy instructors from colleges and universities throughout the nation for professional development and networking, with lots of opportunities to polish our teaching craft. Given that Astronomy 101 teachers in the U.S. host a quarter of a million students each year many of them taking the last formal science course they will ever take, and many of them future classroom teachers—this is important, too.

These two symposia offer an opportunity to combine the strengths of many to a set of shared goals. Won't you join us? The most important connections we may make are the subtler and more powerful ones that Heraclitus was talking about in this case, the ones in which we support each other in our common objectives, though we may come from different disciplines and different science or educational landscapes. We'll save you a spot around the campfire.

While we're talking connections, the ASP provides another way for scientists to connect directly with their public through our Simple Effective Education and Dissemination (SEED) grants for astronomy researchers. These small grants (\$2,500 is the maximum award, the proposal is short, and the requirements reasonable) are designed specifically for researchers to engage in useful acts of EPO, featuring science themes dear to the heart of the Planck and Herschel Missions, which are sponsors of the program. We thank the Planck and Herschel Missions for their support, and encourage you to check out the program at www.astrosociety.org/education/grants/grants.html and make a proposal. The deadline is 31 July 2010.

And let's keep seeking those ways to connect!

### **News from NSF Division of Astronomical Sciences (AST)**

Jim Ulvestad, Division Director, julvesta@nsf.gov

I am honored to be appointed as Division Director for AST, and look forward to serving the astronomical community in a new capacity. In my first few weeks on the job, I have found that the astronomers and administrative staff in AST all are working hard to provide the best management of both facilities and individual investigator grants. We thank the many community members who participate in the merit review process that enables U.S. astronomers to achieve excellence in research and education activities, and enables NSF to provide outstanding instrumentation through its facilities programs.

### **Staff Changes in AST**

The Division of Astronomical Sciences (AST) at NSF has acquired four new scientific staff members in the first quarter of 2010, replacing a number of individuals who have left the division over the last two years. The perceptive reader may guess that being so short-handed in 2009 and early 2010 has put us behind our desired schedule for evaluating proposal submissions from late 2009; please bear with us as we work through our backlog.

Brief biographical descriptions of the new AST staff are given below; note that Dr. Gary Schmidt's appointment was first announced in the January/February Newsletter.

Dr. Katharina Lodders from Washington University in Saint Louis joined AST on 1 March as program director on an Intergovernmental Personnel Act appointment. She is managing individual investigator proposals in the Astronomy and Astrophysics Research Grants program, and specifically in Galactic Astronomy. Her research is on abundances and origins of the elements, chemical processing of gas and dust in various stellar environs, and chemistry in atmospheres of planets inside and outside the solar system and low mass (sub-)stellar objects.

Dr. Paul Morris has joined AST to assist with the management competition for the National Astronomy and Ionosphere Center (NAIC), along with preparations for the Advanced Technology Solar Telescope (ATST). Paul has moved from the NSF Division of Atmospheric and Geospace Sciences (AGS), where he previously oversaw the Upper Atmosphere Facilities (UAF) Program, which operates a chain of incoherent and coherent scatter radars, as well as optical instruments, dedicated to the study of terrestrial ionospheric processes. Paul completed his PhD at the University of Oxford, and comes from an atmospheric remote sensing background, with experience in microwave and infrared optics.

Dr. Gary Schmidt joined AST on 1 February, following a long research and teaching career at Steward Observatory, University of Arizona. He brings experience in optical/IR instrumentation, facilities oversight, and stellar and extragalactic research, and will initially be taking over the management of the Advanced Technology and Instrumentation program from Dr. Jeff Pier. Dr. Jim Ulvestad joined AST as Division Director on March 1, on an Intergovernmental Personnel Act appointment from Associated Universities, Inc. He has divided his research career between the Jet Propulsion Laboratory and the National Radio Astronomy Observatory; in the latter position, he was Assistant Director for New Mexico Operations, overseeing the Very Large Array and Very Long Baseline Array, and later head of the New Initiatives Office. His primary research areas are the parsec-to-kiloparsec scale radio emission from low-luminosity active galaxies and starburst galaxies.

### 2010 NSF Astronomy and Astrophysics Postdoctoral Fellows

The Division of Astronomical Sciences is pleased to announce the 2010 class of NSF Astronomy and Astrophysics Postdoctoral Fellows. Fellows engage in a program of observational, instrumental, theoretical, laboratory and/or archival data research, in combination with a coherent educational plan for the three-year duration of the fellowship. The program is intended to recognize early-career investigators of significant potential and to provide them with experience in research and education that will establish them in positions of distinction and leadership in the community. The new fellows are listed below, together with their host institutions and proposal titles:

- Kathy Cooksey Massachusetts Institute of Technology, "Seeking the Lost Interstellar Medium of Red-Sequence Galaxies"
- Claudia Cyganowski Harvard-Smithsonian Center for Astrophysics and National Radio Astronomy Observatory/University of Virginia, "New Insights into the Early Stages of Massive Star Formation"
- Zachariah Etienne University of Illinois, Urbana-Champaign, "General Relativistic, Radiative Magnetohydrodynamic Simulations of Compact Binary Mergers"
- Erin Hicks University of Washington, "Kinematic Signatures of Black Hole Growth in the Local Universe"
- Christian Johnson University of California, Los Angeles, "Chemical Abundances and the Formation and Evolution of the Galactic Bulge"
- Carl Melis University of California, San Diego, "Phoenix Giants: Their Connection to the Fate of Short-orbital Period Binary Stars and Their Potential for Rebirthing Planetary Systems"
- Gabriel Perez-Giz Massachusetts Institute of Technology, "GWFast(er): Building a Tool to Study Black Hole Orbital Dynamics"
- Megan Schwamb Yale University, "Dwarf Planets of the Southern Hemisphere"
- Ian Sullivan University of Washington, "An Interdisciplinary Investigation of the History of Reionization Using CIBER and the MWA"

#### Washington News continued from back page

coherent message from our community if we hope to influence the FY2012 budget. It will hurt us if the community cannot get behind the Report.

While we are waiting for the Report, there are a few issues we can advocate for during this Appropriations season. A big one is the restart of the Pu-238 production. This isotope is critical for electrical power systems for many planetary science missions right now but is likely to become necessary for other disciplines as time goes by. Restarting production as soon as possible is crucial as there is no current U.S. capability to produce this valuable resource, and the world's supply is rapidly declining. At best, there is only enough left to power one more spacecraft to the outer solar system. Congress zeroed out the budget request for this item last year. It is back in the budget request this year and includes \$15M each for DOE and NASA to share the costs of re-establishing domestic Pu-238 production. Action on this issue is needed immediately to ensure that solar system exploration can proceed without big delays.

Another major issue of concern is the overall state of funding for astronomy. As we have seen, the small increase given to astronomy at NSF and the cuts to astrophysics at NASA indicate that our field is not seen as contributing to the challenges the nation is facing. It is vitally important for our field that astronomy and astrophysics is seen as a part of the R&D infrastructure and contributing to the long-term economic growth of the country.

So at the risk of sounding like a stuck record, I urge you to get engaged in our political process and advocate for funding our field. Let our elected Representatives know why astronomy deserves federal funding. The AAS "Contacting Congress" page (http://aas.org/policy/contact.php) shows you how to get contact information for your Representatives and Senators and also provides tips on how to write letters to Congress and set up a visit. We also have a new flier that lays out our concerns for this year and addresses some of the issues for why astronomy research is a key part of America's R&D investment.

Finally, this will be my last column as the Bahcall Policy Fellow for the AAS. I have accepted a new position as Director of STEM Policy for the Afterschool Alliance, a national non-profit that works on research and policy development for the afterschool arena. I will be spearheading the effort to develop systems and policies for effective STEM learning in the afterschool environment. I have greatly enjoyed my stint as the Bahcall Fellow and the fellowship is proving to be an excellent springboard into other positions as the previous fellows and I can attest to. The position is currently being advertised and I encourage anyone with an interest in policy to apply for it.

### Announcements

#### NRAO Student Observing Support (SOS) Program

The NRAO Student Observing Support (SOS) program is designed to support research by graduate and undergraduate students at U.S. universities and colleges. This program's purpose is to strengthen the proactive role of the NRAO in training new generations of radio telescope users. Applications for SOS program grants are made as supplements to the normal NRAO proposal submission process. Regular proposals submitted for the Green Bank Telescope (GBT), the Very Long Baseline Array (VLBA) and the Expanded Very Large Array (EVLA) are eligible for funding. Large proposals for the VLBA, GBT, EVLA, and any combination of these telescopes are also eligible. General information on the program structure and background information is available on the "Student Observing Support (SOS) Program" page at http://science.nrao.edu/opportunities/sos.shtml.

#### **Imaging Time Available**

Research imaging time through the NSF PREST program is available to the general astronomical community on the new Brigham Young University 0.9m West Mountain Observatory telescope. Specifications of the telescope, available instrumentation, and contact information are listed at http://wmo.byu.edu/ ObsTime/. All interested parties should download a proposal form from this site and submit it according to the instructions within.

Optimum investigations include, but are not limited to, monitoring projects that require observations over several months, time series observations over a few hours, and broadband BVRIc imaging studies that can be queue scheduled. We anticipate that most, if not all, of the available time from May to August will be through service observing.

#### NASA's ExoPAG-2

The second meeting of NASA's Exoplanet Exploration Program Analysis Group (ExoPAG-2) will be held Thursday and Friday, 24-25 June 2010 in Pasadena, CA. The tentative venue for the meeting is the Hilton Pasadena Hotel. Although the meeting agenda is still being formulated, it will likely include discussions in the areas the five science analysis groups (SAGs) that were established after the inaugural ExoPAG meeting. For reference, those five SAGs span the topical areas of:

- 1. Debris Disks and Exozodiacal Dust
- 2. Potential for Exoplanet Science Measurements from Solar System Probes
- 3. Planetary Architecture and Dynamical Stability
- 4. Planetary Measurements Needed for Exoplanet
- Characterization
- 5. State of External Occulter Concepts and Technology

More information about the scope of the current SAGs, as well as the ExoPAG in general, can be found on the ExoPAG website: http://exep.jpl.nasa.gov/ExoPAG/. Information about meeting logistics will also be posted on the ExoPAG web site as planning proceeds.

Any suggestions from stakeholders in NASA's Exoplanet Exploration Program for additional topics of ExoPAG discussion and analysis are welcomed. Please send any suggestions you might have to: NASA-ExoPAG@nasa.gov

### **Calendar of Events**

### **AAS & AAS Division Meetings**

### 216th AAS Meeting w/SPD

23-27 May 2010, Miami FL aas.org/meetings/aas216

### **DPS Annual Meeting**

3-8 October 2010, Pasadena, CA dps.aas.org/meetings/

### **Other Events**

# SPIE Astronomical Telescopes and Instrumentation 2010

27 June - 2 July 2010, San Diego, CA customerservice@spie.org electronicimaging.org/?WT.mc\_id=Cal-EI

# Second Workshop on Binaries in the Solar System

13-15 July 2010, Poznan, Poland Bill Merline or Agnieszka Kryszczynska (binaries2@boulder.swri.edu) boulder.swri.edu/binaries2-mtg/

### Chemistry, Dynamics and Structure of the Milky Way, Summer School and Workshop on Galactic Studies with the LAMOST Surveys 5-23 July 2010, KIAA-PKU, Beijing kiaa.pku.edu.cn/Activities/sw2010/

International Summer Institute for Astrophysical Modeling (ISIMA): Transport Processes in Astrophysics 5 July-13 August 2010, UC Santa Cruz Pascale Garaud (isima@ucsc.edu) isima.ucsc.edu

### Chandra Science Workshop

12-15 July 2010, Boston, MA Pail Green (pgreen@cfa.harvard.edu) cxc.harvard.edu

#### Accretion Processes in X-rays: from White Dwarfs to Quasars 13-15 July 2010, Boston, MA

Paul Green (accr10@cfa.harvard.edu) http:// cxc.harvard.edu/cdo/accr10/

### Probing the High Redshift Universe - Event E12 of the 38th COSPAR Scientific Assembly

18-25 July 2010, Bremen, Germany Pete Roming (roming@astro.psu.edu) http://www.cospar-assembly.org/ IAU Symposium No. 272 Active OB Stars: Structure, Evolution, Mass Loss, and Critical Limits 19-23 July 2010, Paris, France Coralie Neiner (Coralie.Neiner@obspm.fr) iaus272.obspm.fr

#### \*2010 HST Calibration Workshop

21-32 July 2010, Baltimore, MD Susana Deustua & Cristina Oliveira deustua@stsci.edu, oliveira@stsci.edu http://www.stsci.edu/institute/ conference/cal10

\*2010 Sagan Summer Workshop Stars as Homes for Habitable Planetary Systems 25-30 July 2010, Pasadena, CA Dawn Gelino (dawn@ipac.caltech.edu) http://nexsci.caltech.edu/ workshop/2010/

Meteoritical Society Annual Meeting 26-30 July 2010, New York, NY Denton Ebel (debel@amnh.org) metsoc2010.org/

**Cosmos in the Classroom 2010** 1-4 August 2010, University of Colorado, Boulder www.astrosociety.org/events.hmtl

\*Darkness Visible 2010 2-6 August 2010, Cambridge, UK Gerry Gilmore (ioa2010@ast.cam.ac.uk) www.ast.cam.ac.uk/meetings/dv10/

#### 10th International Colloquium on Atomic Spectra and Oscillator Strengths for Astrophysical and Laboratory Plasmas

3-7 August 2010, Berkeley, CA Jaan Lepson (asos10@ssl.berkeley.edu) http://sprg.ssl.berkeley.edu/labastro/ ASOS10/index.html

### \*Astronomy of Exoplanets with Precise Radial Velocities

16-19 August 2010, University Park, PA Jason Wright (jtwright@astro.psu.edu) http://astro.psu.edu/~jtwright/ announcement.rtf

# IAU Symposium 273 - Physics of Sun and Star Spots

22-26 August 2010, Ventura, CA Debi Prasad Choudhary (debiprasad. choudhary@csun.edu) csun.edu/physics/IAU2010/index.html \*CALCON Technical Conference (Annual Conference on Characterization and Radiometric Calibration for Remote Sensing) 23-26 August 2010, Logan, UT Stephanie Halton (stephanie.halton@usurf.usu.edu) http://www.spacedynamics.org/ conferences/calcon/

\*The 16th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun 28 August - 2 Sept 2010, Seattle, WA John Vallerga (info@eurekasci.com) http://www.confcon.com/coolstars16

\*The Delivery of Volatiles and Organics - From Earth to Exoearths with JWST

13-15 September 2010, Baltimore, MD Daniel Apai (apai@stsci.edu)

**The 8th INTEGRAL Workshop** 27-30 September 2010, Dublin, Ireland Lorraine Hanlon (lorraine.hanlon@ucd.ie)

#### Gamma Ray Bursts 2010

1-4 November 2010, Annapolis, MD Neil Gehrels (neil.gehrels@nasa.gov)

#### \*Texas 2010: 25th Symposium on Relativistic Astrophysics

6-10 Dec 2010, Heidelberg, Germany www.mpi-hd.mpg.de/texas2010/

\*New or revised listings

Note: Listed are meetings or other events that have come to our attention. 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 crystal@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 cadcwww.hia.nrc. ca/meetings.



American Astronomical Society 2000 Florida Avenue, NW, Suite 400 Washington, DC 20009-1231

Newsletter 152 May/June 2010

Periodical Postage Paid Washington DC

### **Washington News**

Anita Krishnamurthi, John Bahcall Public Policy Fellow, anitak@aas.org



Now that the healthcare debate is over (more or less), Congress is turning its attention back to other matters. Several authorization and appropriations bills relevant to our community are being considered this Spring.

The America COMPETES Act (America <u>Creating Opportunities to Meaningfully</u> <u>Promote Excellence in Technology</u>,

Education, and Science Act) is going through the re-authorization process. This legislation provides for a doubling of funds for NSF, DOE and NIST between 2007 and 2017. NASA science is not included in the COMPETES Act. The NASA re-authorization bill will also be taken up later this spring or in the summer. That is likely to be contentious given the issues with the human spaceflight program.

All the hearings over the NASA budget thus far have focused on the human space flight program. As you may recall, the President has proposed a new vision for the human space flight program—it involves retiring the shuttle in 2010 and cancelling the Constellation program, but extending the International Space Station to 2020 and invigorating the commercial space flight sector for low Earth orbits. The goal is to have NASA focus on the longer-term goal of going to Mars and invest in technology development to meet this goal. There is currently bipartisan opposition to the President's proposed plan in both the House and Senate. Two big reasons are the prospect of job losses and a fear of losing the American presence in space. It remains to be seen how this issue will play out. NASA is unlikely to have a lot of additional money added to its top-level budget. So a big concern is how the science funding will be affected if Congress decides to re-instate the Constellation program.

The NSF appropriations hearing was dominated by discussions about STEM education, specifically K-12 STEM education. Lawmakers are concerned that the percentage increase in the budget request for the Education and Human Resources Directorate at NSF is small. The explanation is that STEM activities are infused into the science divisions, so we will see if this translates into stricter guidelines for the "Broader Impacts" criterion in NSF grant proposals.

We are in a little bit of a holding pattern as we wait for the Astro2010 Decadal Report to be released in September this year. Our community will have much to advocate for once the Report is released. But as the timing of the release coincides with when the Agencies are finalizing their FY 2012 budgets, we have heard a very strong message from the Office of Science and Technology Policy that they need to hear a coherent message from our community if we hope to influence the FY2012 budget. It will hurt us if the community cannot get behind the Report.