



ASTROPHYSICS

newsletter

2004 APS April Meeting in Denver

The 2004 April Meeting of the American Physical Society will take place in Denver at the Adams Mark Hotel in, of course, May. The scientific program will include three plenary sessions, approximately 45 invited sessions, and more than 100 contributed oral and posters sessions. Astrophysics will be well represented in each category. A summary of invited sessions sponsored by DAP is provided below.

Fellowship Nominations

Members of the Division of Astrophysics are invited and encouraged to submit nominations on behalf of DAP members for Fellowship in the APS. The number of new Fellows elected per year is limited to one-half percent of the current membership, and is apportioned according to Division membership. Every year our division has the opportunity to nominate 6 or 7 APS members for Fellowship. On surveying the current list of DAP members, the Executive Committee noted that there is a considerable number of deserving individuals who have not yet been nominated, so please consider who among your colleagues might be in this situation and organize a nomination on their behalf.

If you would like to recommend a member for Fellowship, please do so by filling out the nomination form that can be found, along with related information, at www.aps.org/fellowship/

Please submit complete nominations *by May 1* to:

Executive Officer
American Physical Society
One Physics Ellipse
College Park, MD 20740-3844
ATTN: Fellowship Program

Unsuccessful nominations submitted for the first time last year will be reconsidered this year by the Fellowship Committee (additional supporting letters would still be welcome). After one year, nominations must be resubmitted

DAP Travel Grants for Students attending the APS April Meeting

We ask you to encourage and support students to attend the upcoming APS April Meeting. There have been modest, but growing, numbers of both graduate

and undergraduate students participating in recent meetings. The students uniformly say that they find the meetings rewarding. The large number of 30-minute invited talks provides an excellent introduction to many areas of physics and astrophysics, and they are suited to experienced researchers and those new to the field. Further, this meeting provides a great opportunity for students to present 10-minute oral presentations.

The Division of Astrophysics decided several years ago to encourage student participation in DAP sessions at the April APS Meeting by awarding approximately ten to fifteen travel grants to student presenters. Any student who is a DAP member by the time of the meeting, and is first author and presenter of a poster or an oral contribution in a DAP-sponsored session is eligible to be considered for a travel grant award. In recent years available grants have gone unclaimed.

Travel Grants Application Process

To apply for a travel grant, a student should send a short letter of application to the DAP Chair Elect (and Program Chair of the April meeting) Steve Holt at steve.holt@olin.edu, including a copy of the abstract that the student is submitting to the meeting. The letter should contain the following:

- a) Name and home institution of the applicant,
- b) Name and affiliation of the student's thesis supervisor or research sponsor, and
- c) An indication of the applicant's career stage, e.g., second year graduate student, about to submit dissertation, or undergraduate junior.

Up to \$500 is available per grant for out-of-state students. Travel grants will be awarded on a first-come, first-served basis, for student abstracts judged to be relevant to astrophysics and assigned to a DAP session. The deadline for the travel grant application is February 13, 2004, which is the deadline for early registration for the Philadelphia meeting, but we encourage applications in early January, prior to the abstract deadline of January 9. (Note that the APS will not process applications for membership in the week preceding the abstract deadline. A non-member student first author submitting an abstract at that time will require an APS member sponsor, and can then join APS and DAP later in January or February.)

Students should also be aware that travel support might be available from other sources (e.g., the Topical Group on Gravitation and General Relativity, and the Division of Nuclear Physics.)

APRIL MEETING IMPORTANT DATES:

Dec	last chance to become an APS member before abstracts are due
Jan 9	abstract deadline (5 pm EST)
Feb 13	early registration deadline
Feb 27	late abstracts
Apr 2	-request satellite meetings -order a/v equipment
Apr 7	housing (Adams Mark)
Apr 9	late registration
May 1	meeting

2003 DAP Election

In our first electronic election voter participation was up to 18% from 10% in recent previous elections. Bernard Sadoulet (vice-chair), Lars Bildsten and Kevin Hurley (at-large) were elected to the Executive Committee. Mark Leising was unopposed for secretary-treasurer. The entire committee is listed below.

Nominating Committee for 2004 Election

Another election approaches. We will choose a Vice-Chair, a Secretary-Treasurer, and two Members-at-large to take office in April 2004. If you are interested in this service to the astrophysics community, or know of someone with such inclination, please contact the nominating committee:

Chip Meegan (charles.meegan@msfc.nasa.gov)
Neil Gehrels (gehrels@lheapop.gsfc.nasa.gov)
Gail McLaughlin (gail_mclaughlin@ncsu.edu)

In addition to nominations from this committee, nominations for any of the positions are accepted from the general membership if submitted in the form of a petition signed by 2% of the DAP membership. (This is would be fulfilled by about 35 signatures.). Candidates selected by the Nominating Committee, as well as any nominated by the membership-at-large will be asked to provide to the Secretary/Treasurer

- (1) a written statement that he or she will serve if elected,
- (2) A paragraph or two listing their qualifications, and
- (3) A position statement regarding their goals for the Division of Astrophysics.

These latter two will be published in the February Newsletter, along with the ballot instructions.

2004 April Meeting Program

Most days at the April meeting will feature early plenary sessions, with speakers and subjects of general interest to all APS members. Of particular interest to DAP members should be plenary talks by Chuck Bennett, Gene Parker, Boris Kayser and Fred Lamb.

There will be also be two invited sessions per day that DAP has arranged, either by ourselves or in collaboration with other APS organizations.

Saturday, May 1: **Magnetic Reconnection**
The Discovery of Black Holes

Sunday, May 2: **Precision Cosmology**
Computational Astrophysics

Monday, May 3: **Nuclear Astrophysics**
The Sun as a Laboratory

Tuesday, May 4: **Jets**
Laboratory Astrophysics

Please check the APS April Meeting website for further details as they develop: <http://www.aps.org/meet/APR04/>

Join APS Sections and Topical Groups

We urge all of our division members to consider joining sections, forums and topical groups relevant to you. Membership is free for sections and forums, and very inexpensive (\$7) for topical groups. There are benefits beyond the obvious ones of the meetings, newsletters, and lobbying efforts of the units. Your membership benefits the units and, indirectly, astrophysics.

The geographical sections are funded entirely by APS in proportion to the number of members. It takes seconds to register for *free* online and help your section. The topical groups (e.g., Plasma Astrophysics, and Gravitation) are funded through their dues, but are awarded invited sessions at APS meetings and APS Fellowship Nominations in proportion their membership. More members in groups of interest to you result in more talks and more Fellows in your area. Further, the existence of the topical groups depends on their maintaining a membership threshold. There are several good reasons to join, and no good reasons not to.

APS Neutrino Workshop Study

Nick Hadley
DPF Secretary-Treasurer

The APS Divisions of Particles and Fields and Nuclear Physics, together with the APS Divisions of Astrophysics and the Physics of Beams, are sponsoring a yearlong Study on the Physics of Neutrinos. The overarching purpose of the study is for a diverse community of scientists to examine the broad sweep of neutrino physics, and if possible, to move towards agreement on the next steps towards answering the questions that drive the field. The study will lay scientific groundwork for the choices that must be made during the next few years.

A public initial meeting of the study will be held at Argonne on Sat/Sun 13-14 Dec. The study leaders are Stuart Freedman from UC-Berkeley and Boris Kayser from Fermilab. An organizing committee has been assembled. Working group leaders are being chosen, and will organize their groups during the workshop. The planned working groups include:

- Solar and atmospheric neutrino experiments
- Reactor neutrino experiments
- Superbeam experiments and development
- Neutrino factory and beta beam experiments and development
- Neutrinoless double beta decay and direct searches for -mass
- What cosmology/astrophysics and -physics can teach each other

Each working group will include both experimentalists and theorists. In view of the many relations between the topics of the different groups, there will be considerable cross talk between them. In addition, the theorists will be asked to consider how neutrino properties to be measured can teach us about the

physics underlying neutrino mass and discriminate among models, and to consider the relation between neutrino behavior that can be observed today and leptogenesis/baryogenesis in the early universe.

The workshop will start Saturday morning with a meeting of the study organizers. Saturday afternoon/evening and all day Sunday the goals of the study will be discussed in a meeting to which the entire neutrino community is invited. This discussion of goals will include the organizing of the individual working groups on Sunday. Further details concerning this first meeting of the study, including details on access to Argonne, will be distributed very shortly. Some details can be found at the web page: <http://www.neutrinooscillation.org/studyaps/>

The working groups will meet as necessary during the year, with the goal of completing their work in time for a final meeting of the study in late May or early June.

Future Newsletters

If you have items of general interest to DAP members, consider submitting them to the Secretary-Treasurer for upcoming newsletters (February and November 2004.) We will be happy to publish meeting announcements or letters.

APS/DAP on the WWW

<http://photon.phys.clemson.edu/dap/>

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