The American Physical Society The Division of Astrophysics

November 1996

No. 86 NEWSLETTER November, 1996

Important deadline!

January 17, 1997 -- April 1997 APS meeting abstracts due.

read on for details

check out the NEW DAP homepage at http://int.phys.washington.edu/dap/

1996-97 OFFICERS

The 1996-97 officers of the Division of Astrophysics Executive Committee are:

Wick Haxton, U. Washington, our new Chair,

Richard E. Lingenfelter, UC-San Diego, Chair-Elect and Chair of 1997 Meeting Program Committee,

Josh Grindlay, Harvard-Smithsonian CfA, our new Vice-Chair,

Leon Golub, SAO + Harvard, and

C. Megan Urry, STScI

continue as members-at-large of the Executive Committee.

Charles Dermer, NRL, and

John Huchra, Harvard-Smithsonian CfA,

are newly-elected members-at-large.

Claude R. Canizares, MIT, past-Chair

Frank Jones, NASA-GSFC, Division Councilor

Patricia Boyd, USRA and NASA-GSFC, our new Secretary-Treasurer.

The total number of ballots received was 356, an increase of 8.4% from last year's total. Still, only 26% of the DAP membership voted. We thank those members who participated in the election, and encourage all members to vote next time!

APS MEETING, APRIL, 1997

The next meeting of the Division of Astrophysics will be at the joint APS-AAPT General Meeting Friday through Monday **18-21 April 1997** in **Washington**, **DC**. The **deadline** for invited and contributed abstracts for this meeting is:

17 January, 1997 (5:00 pm ET)

For further logistical information, please contact:

APS Meetings Department One Physics Ellipse College Park, MD 20740-3844

Tel: (301) 209-3286 Fax: (301) 209 0866

Internet email: meetings@aps.org

Richard Lingenfelter is the 1997 Program Committee Chair for DAP. This year the DAP is trying something new: a session of invited talks given by speakers nominated by DAP members. A nomination form and the preliminary program appears later in this issue.

NOTE FROM THE DAP CHAIR

Dear DAP Member:

The Executive Committee has taken a couple of steps to make the DAP somewhat more user friendly. Our Home Page is now operating. It can be accessed through the APS Home Page by clicking on Divisions, or directly at:

http://int.phys.washington.edu/dap/

Please send corrections or suggestions to me, including ideas for additional links. The DAP would like to acknowledge the help of John Beacom and Michael Frank in getting us started.

This year's program chair, **Rich Lingenfelter**, is trying out a new idea, a DAP session for the Washington, DC meeting with talks selected from community nominations. A nomination form was sent to the membership through a mass emailing; it is also available as a postscript file on the home page. The Executive Committee felt that community nominations could strengthen and broaden the annual meeting, and would be particularly important in bringing younger speakers to the attention of the Executive Committee. If you know of someone who deserves to speak at an upcoming meeting, let us know. If the experiment is a success, it will be repeated next year.

Wick Haxton 1996-97 Chair, DAP

APS MEETING, DAP SESSIONS

APS DIVISION OF ASTROPHYSICS

APR '97 MEETING WASHINGTON, DC

The next meeting of the Division of Astrophysics will be at the joint APS-AAPT and CAM'97 General Meeting

on 18-21 April 1997 at the Renaissance Hotel, 999 9th Street NW, Washington, DC, across the street from the Convention Center.

For this meeting we are planning sessions on **COSMIC RAYS** (organizer: Frank Jones), **X-RAY TIMING** (organizer: Rick Rothschild), **Supernovae/ISM** (organizer: Jim Higdon) and joint sessions with **DAP/DNP** (organizers: Wick Haxton / Michael Smith), **DAP/DPF** (organizers: George Fuller /Howard Georgi), and **DAP/IMSTG** (organizers: Dan McCammon / Robert Soulen) plus a **COLLOQUIUM** (organizer: Wick Haxton).

We also plan to experiment with a new **SPECIAL SESSION** composed of topics and invited speakers that are selected from nominations by DAP members at large. E-mail requests for nominations were sent out last month and we have had a good response. The final program was to be completed by October 25th. Details of this program, including the new special session, will be distributed to the DAP membership shortly thereafter.

We greatly appreciate your suggestions, and look forward to hearing from you.

Rich Lingenfelter Chair 1996-97 DAP Program Committee

NEW FELLOWS

The following distinguished colleagues were made Fellows of the American Physical Society during the Business Meeting of the Division of Astrophysics on Thursday, May 2, 1996 at the APS meeting in Indianapolis:

Gerald Fishman

Marshall Space Flight Center

"For pioneering advances in gamma-ray astronomy, particularly his important observations of gamma-ray bursts that suggest a possible cosmological origin."

Margaret J. Geller

Harvard-Smithsonian Center for Astrophysics

"For her pioneering contributions to mapping the nearby universe and elucidating the large-scale structure in the distribution of galaxies."

James Conway Higdon

The Claremont Colleges

"For his important work on interplanetary and interstellar turbulence and his innovative studies of gamma ray bursts, cosmic rays, pulsars, novae, supernovae, and galactic nucleosynthesis."

Richard Alfred Matzner

University of Texas at Austin

"For his analyses in general relativity of a wide range of astrophysical phenomena, especially his numerical simulations of strong-field gravitational systems and the gravitational radiation they produce."

Thomas A. Weaver

Lawrence Livermore National Laboratory

"For his crucial contributions to our understanding of massive stars and their evolution, supernovae, and the origin of the chemical elements."

Samuel Harvey Moseley. Jr.

NASA/Goddard Space Flight Center

"For his contributions to instrumentation in astrophysics, especially his conception and development of the X-ray microcalorimeter and his studies of the SN1987A fine structure lines of iron with long-wavelength infrared detectors."

Joseph I. Silk

University of California, Berkeley

"For his pioneering role in understanding the cosmic microwave background radiation and the formation of large-scale structure in the universe, and in recognition of the bridges he helped establish between particle and nuclear physics and cosmology."

Richard Eiseman Rothschild University of California, San Diego

"For his seminal work in determining the spectra and time variations of cosmic X-ray sources, and for his innovative development of instrumentation for these studies."

NOMINATIONS for FELLOWSHIP

Each year the Astrophysics Division may nominate 6-7 APS members for fellowship. Nominations are due before April 30, 1997. These should be submitted directly to the APS. The required form is obtainable from **Josh Grindlay** or directly from APS. Please allow some time to collect the necessary information in support of a candidate. The nominating committee would be grateful for your suggestions of appropriate nominees.

APS BETHE PRIZE ESTABLISHED

The American Physical Society has established the Hans A. Bethe Prize in recognition of Bethe's "outstanding and numerous accomplishments in both astrophysics and nuclear physics." The prize was announced on Hans's 90th birthday, July 2, at a Cornell reception attended by many colleagues, friends, and family. Judy Franz, executive director of the APS, said on making the presentation to Hans: "Your name brings very special significance to this prize."

Hans expressed his delight that so many friends had helped in establishing a prize in his honor. He proceeded to describe some problems he had not (yet!) been able to solve - including the origin of nuclear saturation and several puzzles from stellar astrophysics - and expressed the hope that others would take up the call to solve these important problems. Then he cut a generous piece of his birthday cake, signaling the start of the celebration. [Photos of this affair are on the new DAP home page, the URL of which is listed elsewhere in this newsletter.]

Among Hans's many accomplish-ments in physics are his 1947 calculation of the Lamb shift, which led to the development of quantum electrodynamics, and his theory of energy production in stars, for which he was awarded the Nobel Prize in 1967. Hans has worked at Cornell for more than 60 years. He emigrated from Germany in 1935.

The effort to create the Bethe Prize was spearheaded by the Division of Astrophysics and the Division of Nuclear Physics. Hans has long been a member of both. The prize includes a \$7500 award and will be given for work in theory, experiment, or observation in nuclear physics, astrophysics, or nuclear astrophysics. It will be awarded annually beginning in 1998.

The prize is now fully endowed at the level of \$156,000 due to the generosity of more than 400 individuals,

universities, national laboratories, and industry. The Bethe Prize Committee, which organized the contributions, plans to disband on October 1.

W. Haxton for the Bethe Prize Committee

Division of Astrophysics Nominating Committee

The members of the 1996-97 Committee are:

Fred Seward

Smithsonian Astrophysical Obs. 60 Garden St. Cambridge, MA 02138 fds@cfa.harvard.edu

Joseph Silk

Dept. of Astronomy UC Berkeley Berkeley, CA 94720 silk@ucbast.berkeley.edu

We are awaiting a third member, who is to be appointed by the APS.

Duties of the nominating Committee are to nominate at least one willing candidate for the offices of Vice Chair and at least two candidates for each open position of Member-at-large of the Executive Committee (two positions open this year). The Division Councilor position is also open this year. You may contact the nominating committee with suggestions of appropriate candidates. Alternatively, 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 membership of DAP (currently at 1392 members).

Each candidate must supply to the Sec-Treas. (i) a written statement that he/she will serve if elected and (ii) a paragraph or two providing their qualifications and thoughts about the job. These will be published in the Spring newsletter with the ballots.

The procedure is prescribed by the Bylaws, reproduced in the Feb 93 newsletter (#78), and available through the DAP homepage. The schedule is tied to the annual April APS meeting, to be held April 18-21, 1997 this coming year.

Deadlines are:

Nov 29 '96 Sec.-Treas. issues call for nominations (via this newsletter).

Dec 29 '96 Names of candidates and their statements to Sec.-Treas.

Feb 1 '97 Sec.-Treas. sends ballots to members of Division.

March 15 '97 Closing date for return of ballots to Sec.-Treas.

April 18 '97 Annual business meeting: Announce results!

Please note that above dates are **deadlines**. We hope to include the ballots in a late January newsletter mailing.

GRADUATE STUDENT REGISTRATION "FELLOWSHIPS" FOR APRIL '97 MEETING

To encourage the attendance of students, the APS & DAP will once again pay the registration fee for a number of graduate students. Undergraduates may attend free. As it is cheaper to join the APS and register than to register as a non-member, the offer for graduate students is a free one year's membership in the APS and DAP in conjunction with a paid registration fee. Application should be made in advance to the DAP Secretary, Patricia Boyd, padi@dragons.gsfc.nasa.gov. Attendance at APS meetings is a great way for students to network with researchers in similar disciplines. Please encourage any student you know who may not have meeting attendance support to apply for this fellowship.

Plasma Astrophysics Working Group

The Plasma Astrophysics Working Group (PAWG) was authorized by the Executive Committee of the APS Division of Plasma Physics last year and its official activities began last summer. Toshi Tajima served as first chairman of this Group, following several years of unofficial group activities. This past year the PAWG carried out intellectual as well as advocacy activities that promote growth in astrophysical research by plasma physicists and understanding, support, and interest from mainline astrophysicists. If you are interested in the activities of the group, contact

Toshi Tajima, Chairman University of Texas, Austin Institute for Fusion Studies MS C1500 26th and Speedway, RLM 11.214 Austin, TX 78712 ttt@dino.ph.utexas.edu

Recruit your students, co-workers!

With the arrival of the Fall semester, we remind graduate and undergraduate student advisors that the first year of student APS membership is **free of charge**. Please take a moment to encourage your students to join the APS and the DAP. In particular, the career services of the APS should prove helpful to today's students, many of whom are uneasy about their employment prospects.

The number of DAP (and APS) members has gone down in recent years. Please encourage your colleagues in astronomy and physics to join the division if they have not done so. For more information, contact any officer of the DAP or the APS directly.

Are you receiving email from DAP?

Information of immediate importance to DAP members is often distributed through a DAP email exploder that the APS has established. Recently, news of the Bethe prize, as well as a call for invited speaker nominations for the upcoming APS meeting have been emailed to our members. If you did not receive these messages, please take a moment to check that your email address is current in the APS records. This can be done by contacting the APS offices directly, or by contacting P. Boyd of the DAP. Don't be left out of the loop!

Future Newsletters

The next DAP Newsletter will be composed and sent in January 1997. If you have an item that may be of

interest to our members please send it to me for inclusion in the next edition. Suggestions for improvement in format, corrections, etc. are always welcome.

Patricia T. Boyd Secretary-Treasurer of DAP of APS Laboratory for High Energy Astrophysics, NASA--GSFC Code 662 Greenbelt, MD 20771 Internet:padi@dragons.gsfc.nasa.gov

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