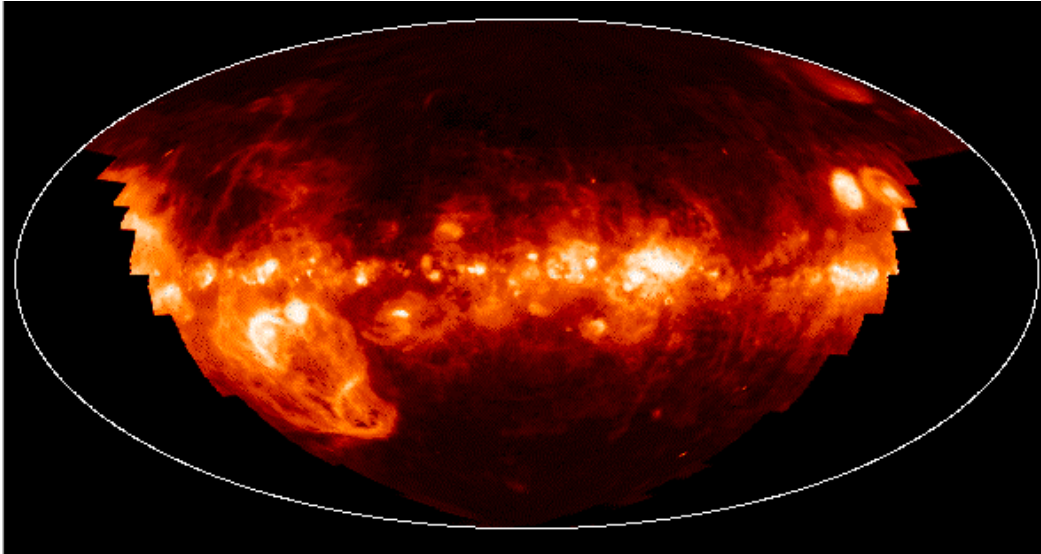


The Plasmatic



This image shows the H-alpha glow from plasma throughout the interstellar medium, as mapped by the WHAM Fabry-Perot interferometer instrument of the University of Wisconsin, R.J. Reynolds, principal investigator. Further description of this image and the WHAM project can be found online at <http://www.astro.wisc.edu/wham>

Newsletter of the Topical Group on Plasma Astrophysics

February 14, 2002

A Message from the New Chair of GPAP

I am very pleased to be able to say that our fledgling topical group is operating well and is beginning to have some impact. Within the community that can be broadly designated “plasma astrophysics”, we must continue to succeed in involving individuals with a wide range of professional focus, including (nearby) space plasmas, (distant), astrophysical ones, laboratory work of relevance to space and astrophysics, and theoretical work that may span all these areas. Our executive committee and past nominating committees deserve credit for sustaining this broad emphasis.

Looking outward, a bigger challenge is to facilitate and increase the impact of plasma physics throughout all of astrophysics (including space science). This requires a steady effort from many of you. Our miniconferences at the APS/DPP meeting have been a success, being well attended and bringing people to DPP who would not otherwise come. Many thanks to Bill Matthaeus and Peter Gary for organizing our most recent miniconferences. I would urge all GPAP members to consider proposing a minisymposium for this year’s DPP meeting (see item below). This is a good way to advance an area you care about.

We also have two APS fellows, Hideaki Takabe and Ethan Vishniac, who were put forward by us. So far, however, we have not had enough nominees from the group. Please consider nominating someone for Fellowship this year.

We are pleased to be listed as endorsers on the web site for the ICPP2002 meeting in Sydney next summer (<http://www.ise.canberra.edu.au/ICPP/>). Please do bring to our attention other meetings that we might gain by endorsing or other ways to advertise our existence. You might also consider finding ways to advertise your own involvement with the topical group, for example by noting that you are a member when you give talks. We need to get the word out and to build membership.

Finally, I'd like to give thanks and credit to our past chairs (Amitava Bhattacharjee, Bruce Remington, and Jim Chen) for moving the group forward to this point.

R. Paul Drake

APS Fellow from GPAP

The APS Fellow for this year from GPAP is Professor Ethan Vishniac of Johns Hopkins University. Ethan has been involved in plasma astrophysics and astrophysical fluid dynamics for many years, and has the honor of having had the only astrophysical theory I know of that was verified by laboratory experiments! Ethan's recent work has involved the main issues in plasma astrophysics, such as turbulence and reconnection in the context of the interstellar medium, and the origin of the galactic magnetic field.

Steve Spangler

Nominations for Fellowship in the APS

Nominations for Fellowship in the APS will be accepted by the Topical Group on Plasma Astrophysics until April 1, 2002. Probably one member of the APS will receive APS Fellowship through GPAP in 2002. Information about the APS Fellowship Program and the required nomination forms can be found at <http://www.aps.org/fellowship/>

Nominations are to be submitted to:

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

With a copy to the chairman of our group's Fellowship Committee:

Jonathan Arons
Department of Astronomy
University of California
601 Campbell Hall
Berkeley, CA 94720-3411
Tel: 510-642-4730
Fax: 510-642-3411

Email: arons@astron.berkeley.edu

Minisymposia at the November Meeting of the Division of Plasma Physics

The central activity of GPAP is the organization of sessions and minisymposia at the annual meeting of the Division of Plasma Physics. Last year at Long Beach, we had two such minisymposia, one on MHD turbulence, and the other on magnetic reconnection. These sessions were well attended and led to a good deal of discussion and sharing of ideas, and illustrated the advantages of this type of “meeting within a meeting”. This Fall the Division of Plasma Physics will be meeting at Orlando, Florida, November 11-15. We hope and expect to schedule a GPAP minisymposium, but receiving an allocation will depend on our coming up with a good topic that can receive the benediction of the DPP program committee.

The purpose of this item is to solicit recommendations from GPAP members for minisymposia. We would be particularly interested in “object-oriented” topics, which might help attract more astronomers. Possible examples might be “Plasmas in Clusters of Galaxies”, or “The Plasma Physics of Pulsar Radiation Mechanisms”. A “proposal” consists of a title, a one-to-two paragraph abstract describing the issue, its current status in the panorama of science, and a straw-man list of invited speakers. This speaker list need not have any commitment from the individuals involved. It should indicate who you *would* approach should the idea be approved. Finally, an obligation is incurred. If you propose a minisymposium, **we expect that you will organize it as well**. In practice, this means following through and contacting your speakers (or going down on the depth charts when you get turned down), obtaining titles, and making sure they actually get their abstracts submitted.

These proposals should be sent to me at srs@astro.physics.uiowa.edu, or by post to the University of Iowa. I will organize the proposals and submit them to the GPAP program committee for their deliberation. **I need to have these proposals by March 1, 2002**. Finally, even if your proposal is not accepted, it could serve as the topic for a special session in the regular meeting. Organization of special sessions within the regular DPP meeting is an area which would be fruitful and easy, and which we want to develop within GPAP.

Follow-Up on Last Year’s Minisymposia

If you presented a paper in one of last November’s minisymposia on plasma turbulence in astrophysics or reconnection, or attended one of these minisymposia, please consider contributing a paper on this topic for the Division of Plasma Physics meeting this November. We are trying to organize special sessions of contributed talks or posters on these topics. We hope to establish this as a model in the future; a minisymposium will be held one year and a special session of contributed papers will follow the next year. We will try and get ourselves organized and send out additional

instructions before the July deadline. In any case, if you submit an abstract in response to this request, include a comment indicating the destination for your paper.

International Conference on Plasma Physics, July 2002

The International Conference on Plasma Physics (ICPP) is a major international conference on the subject of plasma physics, held every two years. In 2002 it will be held in Sydney, Australia. The dates of the conference are July 15-19, and the conference website is <http://www.ise.canberra.edu.au/icpp2002>. The organizers of the conference are very keen on a major plasma astrophysics component. GPAP is one of the endorsers of this meeting, so we would like to have as many of the brethren as possible attend. Abstracts for late posters will still be accepted until April 15, 2002. Regular registration is also open until April 15.

4th International Conference on High Energy Density Laboratory Astrophysics

Another meeting endorsed by GPAP is the 4th International Conference on High Energy Density Laboratory Astrophysics, to be held at the University of Michigan, February 23-25, 2002. This meeting will concentrate on many of the topics most germane to GPAP, such as experimental and theoretical studies of laser-target interactions, the theoretical understanding of these processes, and the extrapolation of this knowledge to astrophysical settings such as supernova explosions. Information about the meeting can be obtained at http://aoss.engin.umich.edu/Aoss/AOSS_Web_Site/hedla/hedla02.html. The abstract deadline has unfortunately passed, but it is still possible to register and attend.

Items for *The Plasmatic* ?

If you would like to suggest additional items for our newsletter, contact the GPAP Secretary-Treasurer, Steve Spangler, at srs@astro.physics.uiowa.edu.
Steve Spangler