

# **The American Physical Society The Division of Astrophysics**

## **February 1998**

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## **1998 April Meeting**

**Josh Grindlay, DAP Chair-Elect and Program Chair**

The April Meeting of the APS will be held in Columbus, Ohio from April 18 to 21. We have put together what should be an exciting program for the DAP sessions at the upcoming Spring APS meeting in Columbus, OH, which is Saturday April 18 - Tuesday April 21, 1998. As with past years, we have both DAP-only and DAP-shared sessions for the meeting, with 6 sessions of invited talks (3 DAP and 3 DAP-shared: with DPF (particles and fields), DNP (nuclear physics) and DPP (plasma physics)). Note that we (DAP) have been given two (of the 12) Plenary Talk slots as well: Wendy Freedman (Carnegie Observatories) on "Recent Measurements of Cosmological Parameters", on Sat. April 18; and Shri Kulkarni (Caltech) on "Gamma Ray Bursters: Dying Cries from the Distant Universe", on Sun. April 19. The Plenary Talks (3 each on Sat. and Sun.; 6 on Mon.) are a new experiment in inter-disciplinary talks for the April meeting and will include a wide range of interesting topics. There will be many contributed DAP paper sessions and we encourage you to register to attend (by March 6 for lowest rate) the meeting. Please bring/send your students as well! Full details of the meeting can be found on the APS meetings website at <http://www.aps.org/meet/APR98>.

Many thanks to those who sent in the excellent suggestions for invited speakers for the DAP session nominated by membership. Although only one session was so chosen for this year (from Chuck Dermer), these nominations will again be an invaluable resource in the planning of the DAP sessions for next year's meeting, which will be led by the next program chair, Trevor Weekes.

## **Final Program for DAP Sessions (DAP and DAP/other) for APS/AAPT Joint Meeting Columbus, OH April 1998**

**INVITED SESSIONS**  
**APS DIVISION OF ASTROPHYSICS**

***DAP (only) Sessions:***

**Session 1: OUTFLOWS POWERED BY BLACK HOLE AND STARBURST ACTIVITY**

Date/Time: Sunday April 19, 1998; 11:00-2:00

Chair: Charles D. Dermer, NRL

**Speakers/Titles:**

1. R.M. Hjellming, National Radio Astronomy Observatory "Relativistic Jets from Black-Hole X-ray Transients and Binaries"
2. Sylvain Veilleux, University of Maryland "Ultraluminous Infrared Galaxies and the Origin of Nuclear Activity"
3. Edward Colbert, Goddard Space Flight Center "Large-scale Galactic Outflows in Seyfert Galaxies"
4. Ann E. Wehrle, IPAC/ Caltech/ JPL "Multiwavelength Observations of Blazars"

**Session 2: PROBING BLACK HOLES AND NEUTRON STARS WITH THE ROSSI EXPLORER**

Date/Time: Monday April 20, 1998; 11:00-2:00

Chair: Jonathan E. Grindlay, Harvard

**Speakers/Titles:**

1. Michael Nowak, JILA and University of Colorado "QPOs from Black Hole Candidates: Disk Oscillations or Frame Dragging"
2. Brian Vaughan, Caltech "QPOs and Oscillations from Neutron Stars: Probing the Emission Regions"
3. William Zhang, GSFC "High Time Resolution Studies of X-ray Bursts: Neutron Star Structure"
4. William Heindl, UCSD "New Results on Cyclotron Lines and Magnetic Fields on Neutron Stars"
5. Fred Lamb, University of Illinois "RXTE Constraints on Theories of Dense Matter and Neutron Stars"

**Session 3: NEW RESULTS ON GAMMA-RAY BURSTS**

Date/Time: Tuesday April 21, 1998; 8:00-11:00

Chair: Chryssa Kouveliotou, MSFC

**Speakers/Titles:**

1. Gerald Fishman, MSFC "The Latest Observations of Gamma-ray Bursts"
2. Jan van Paradijs, University of Alabama/Univ. Amsterdam "Optical Counterparts for GRBs"
3. Enrico Costa, IAS, Rome "X-ray Afterglows from GRBs"
4. Dail Frail, National Radio Astronomy Observatory "Radio Counterparts for GRBs"
5. Peter Meszaros, Penn State University "Models and Understanding of GRBs"

***Joint DAP Sessions:***

**DAP/DPF Session: HIGH ENERGY GAMMA-RAY PROBES OF COSMIC PARTICLES AND FIELDS**

Date/Time: Saturday April 18, 1998; 2:30-5:30

Chair: Trevor Weekes, SAO

**Speakers/Titles:**

1. James Buckley, Washington University (St. Louis) "TeV Gamma-rays and CR Acceleration in Supernova Remnants"
2. David Bertsch, GSFC "GeV Gamma-rays from Active Galaxies"
3. Michael Catanese, Iowa State University "TeV Gamma-rays from Active Galaxies"
4. Joel Primack, University of California, Santa Cruz "Probing the Intergalactic Diffuse IR Background With TeV Gammas"
5. Brenda Dingus, GSFC "New Observatories - Earth Bound and Space Bound - for Gamma-Ray Astrophysics"

**DAP/DPP Session:** PLASMA ASTROPHYSICS ON STELLAR TO GALACTIC SCALES

Date/Time: Sunday April 19, 1998; 2:30-5:30

Chair: Jonathan E. Grindlay, Harvard

**Speakers/Titles:**

1. Telemachos Mouschovias, University of Illinois "Plasma Processes in the Star Formation Problem"
2. Joseph Hollweg, University of New Hampshire "Coronal Heating and acceleration of the Fast Solar Wind"
3. Bruno Coppi, MIT "Transport in Accretion Disks and Laboratory Plasmas"
4. Ronald Reynolds, University of Wisconsin "The WHAM H-alpha survey and the Ionization of the Diffuse Interstellar Medium"
5. John P. Hughes, Rutgers University "Understanding Plasmas in Galaxy Clusters"

**DNP/DAP Session:** Cosmic Cooking: The Origin of Elements

Date/Time: Monday April 20, 2:00-4:15

Chair: Michael Smith, Oak Ridge National Laboratory

**Speakers/Titles:**

1. Claus Rolfs, Ruhr Universitat Bochum, Bochum, Germany " Project LUNA: Understanding how the Sun Fuels"
2. Christian Illiadis, University of North Carolina "Element production in Novae and Supernovae"
3. John Cowan, University of Oklahoma "R-process signatures from Stars"
4. Donald Clayton, Clemson University " Overview of results and interpretations of Meteoritic Abundances"

## 1998 HANS A BETHE PRIZE

to John Norris Bahcall, Institute for Advanced Study, Princeton

**Citation:**

"For his fundamental work on all theoretical aspects of the solar neutrino problem and his important contributions to other areas of nuclear astrophysics."

**Background:**

Dr. Bahcall received his BA in physics from the University of California, Berkeley in 1956 and his Ph.D. from Harvard University in 1961. He was on the faculty of California Institute of Technology and has been a Professor of Natural Sciences at the Institute for Advanced Study, Princeton, since 1971. Dr. Bahcall's areas of expertise include models of the Galaxy, dark matter, atomic and nuclear physics applied to astronomical systems, stellar evolution, and quasar emission and absorption lines. In collaboration with Raymond Davis Jr., he proposed in 1964 that neutrinos from the sun could be detected via a practical chlorine detector. In the subsequent three decades, he has refined theoretical predictions and interpretations of solar neutrino detectors. Dr. Bahcall was awarded the 1970 Warner Prize of the

American Astronomical Society for his research on quasars and on solar neutrinos, the 1994 Heineman Prize by the American Astronomical Society and the American Institute of Physics for his work on solar neutrinos, and the 1992 NASA Distinguished Public Service Medal for his observations with the Hubble Space Telescope. He was president of the American Astronomical Society from 1990 - 1992 and chair of the National Academy Decade Survey Committee for Astronomy and Astrophysics in the 1990s which successfully set priorities for research projects. The Bethe Prize consists of a \$7500 award and a certificate citing the contributions made by the recipient. A new committee has formed to choose the next recipient. The APS Guide for Nominating Candidates recommends that nominations include a nomination letter not to exceed 1000 words, a biographical sketch, a list of publications, two or three seconding letters, and up to five reprints or preprints. Nominations must be received by the APS by July 1, 1998, to be considered this year.

### **Bethe Prize Nominations**

This is the first year that the Division of Nuclear Physics and the Division of Astrophysics have awarded the Hans Bethe Prize. The Bethe Prize Committee consisted of Hans Bethe, Ernest Henley (chair), John Schiffer, Virginia Trimble, and Stanford Woosley. The Committee recommended that the 1st. Bethe prize be awarded to John Bahcall "for his seminal work on all (theoretical) aspects of the solar neutrino problem and his important contributions to other areas of nuclear astrophysics." This recommendation has been accepted by the APS and the prize will be awarded at the April meeting.

## **DAP Election 1998**

It's time again to elect new officers and members-at-large for the Executive Committee. The candidates for vice-chair, member-at-large, and secretary/ treasurer have provided their statements below. Please review them, and vote on the enclosed ballot! DEADLINE: March 27, 1998 ballots must be received

## **For Vice Chair**

### **Peter Meszaros**

**Biographical Information:** Current position: Professor and Head, Department of Astronomy and Astrophysics, Pennsylvania State University. Previously staff scientist, Max Planck Institute for Astrophysics, Garching; research fellow, Institute of Astronomy, University of Cambridge; research fellow, Princeton University Observatory; also visiting scientist, Institute for Theoretical Physics, UCSB; Harvard-Smithsonian Center for Astrophysics; NASA Goddard Space Flight Center. I received my Ph.D. in 1972 from the University of California, Berkeley, and received the first prize of the Gravity Research Foundation in 1976. I am a Fellow of the APS, member of the Board of the Hobby-Eberly Telescope, and have served on the Executive Committee, as well as chair of the nominating committee, of the Astrophysics Division of the AAS. My main research interests are in theoretical high energy astrophysics and cosmology, in particular gamma-ray bursts, neutron stars, black holes, radiation backgrounds and galaxy formation. Most recently I have been involved in proposing and developing the cosmological fireball shock scenario of gamma-ray bursts and their afterglows.

**Candidate's Statement:** Astrophysics is increasingly weaving itself into the mainstream of the physics community, as well as being the focus of increased public attention. This is both a serious responsibility and a source of major opportunities for our community. We need to make the public more aware of the exciting opportunities and achievements of astrophysics, and to communicate our goals and aspirations in the context of the current social and political climate, in order to make a strong case for the funding of the

strategic plans of the astrophysical community, and of physics in general. Astrophysics is a science of great appeal to the imagination of the public, and is therefore well-suited for promoting science in general and public education. Our division is in a good position to play a larger role in public outreach and in providing information to legislators and funding agencies. There is a great sense of excitement in astrophysics, with spectacular new discoveries being made, and we need to exploit this by communicating it in an effective and responsible manner to a broad audience. In addition to ensuring that we have top-notch speakers at our DAP meetings, we need to increase our efforts to develop conference programs which emphasize interdisciplinary research which is accessible to APS members from sister divisions, such as Nuclear, Particles, Atomic, Plasma and Condensed Matter. This is important both for increasing awareness about our discipline and for recruiting new members, as well as for providing overviews of the achievements and the expected impact of future experiments, which is necessary in order to develop a strong physics-wide support base for the funding and promotion of key research initiatives.

## Virginia Trimble

**Biographical Information:** Virginia Trimble currently oscillates at 31.7 nHz between the Physics Department of University of California, Irvine and University of Maryland. Her degrees are from UCLA (BA 1964), Caltech (MS 1965, PhD 1968), and Cambridge (MA 1969) and her research interests over the years have included white dwarfs, the Crab Nebula and other supernovae and their remnants, statistics of binary stars, and advanced stages of stellar evolution. Previous APS service includes the executive committee of the Forum on the History of Physics, Secretary-Treasurer of the Division of Astrophysics, and current membership on Council. She has also held various mid-level positions in the American Astronomical Society, International Astronomical Union, and other scientific societies.

**Candidates's Statement:** I believe that the primary purpose of the APS divisions is to act as advocates and promoters of our specialties within the APS itself and to the world at large. The relevant tasks include planning interesting scientific programs for the annual meeting, nominating outstanding astrophysicists for fellowship, for prizes, and for committees and offices within the society, responding to requests from the press and from other organizations for information, speakers, and writers, and urging members to make their voices heard in support of science and science education at the federal, state, and local levels.

## For Member-at-Large

### Patricia Boyd

**Biographical Information:** Patricia T. (Padi) Boyd is a research astrophysicist with Universities Space Research Association. She is currently an RXTE duty scientist in the Laboratory for High Energy Astrophysics at Goddard Space Flight Center. She holds a Ph.D. in Physics awarded in 1993 from Drexel University. She has previously been a member of the Hubble High Speed Photometer Team and the Monitoring X-ray Experiment (MOXE) Team for the upcoming Spectrum X-Gamma mission. She is the current Secretary/Treasurer of the APS Division of Astrophysics. She also coordinates the X-ray Public Outreach Group at GSFC.

**Research Interests:** Development of analysis techniques for nonperiodic variations in astrophysical systems, X-ray binaries, pulsars, polarization in astrophysical systems.

**Candidate's Statement:** During the next two years, the DAP has the chance to make a memorable impact on the APS Centennial Celebration, an event which is sure to grab the attention of the general public. As a Member-at-Large of the DAP, I would strive to make sure that the intricate interplay between astrophysics and nearly all other branches of physics is highlighted during the Centennial year. My two-year term as DAP Secretary/Treasurer has made me well aware of the responsibilities of our division and the

workings of the APS. I would be happy to continue serving the astrophysics community as an Executive Committee Member-at-Large

## **Jerry Fishman**

**Biographical Information:** Gerald J. (Jerry) Fishman is an astrophysicist in the Space Sciences Laboratory of the NASA/Marshall Space Flight Center and the head the gamma-ray astronomy research group there. He is the Principal Investigator of the Burst and Transient Source Experiment (BATSE) on the Compton Gamma Ray Observatory. Jerry obtained his Ph.D. in 1970 from Rice University. He has participated in numerous balloon-borne experiments and in the development of nuclear instrumentation for space-borne applications and has also served as the principal scientist on experiments on Skylab, Spacelab and the Long Duration Exposure Facility. He is a Fellow of the American Physical Society and was awarded the Bruno Rossi Prize of the AAS in 1994.

**Research Interests:** Gamma-ray bursts, x-ray and gamma-ray astronomy, nuclear astrophysics, background radiation in space.

**Candidate's Statement:** The Astrophysics Division is unique in combining astronomy and astrophysics with many diverse fields within physics. In this role, the Division can simultaneously serve both astronomers and physicists in areas of career planning, research funding opportunities, education and outreach programs. Through invited talks at APS meetings, it can also stimulate new directions for research that would appeal to both physicists and astronomers.

## **Mark Leising**

**Biographical Information:** Mark Leising received a B.S. from the University of Notre Dame, and an M.S. and Ph.D., in 1987, from Rice University. He was an NRC/NRL post doc at NRL (1986-1988) and NRL staff astrophysicist (1988-1991), before joining the faculty at Clemson University as an Assistant Professor (1991-1994), and Associate Professor (1994-present.) He is currently on sabbatical for one year at the Max Planck Institut fuer Extraterrestriche physik in Garching, Germany. His research has centered on gamma-ray studies of nucleosynthesis events, especially supernovae and classical novae, and of galactic structure as revealed through diffuse radioactivity and positrons. He also studies the cosmic gamma-ray background and the implications of measurements of radioactivity in the early solar system. He has taught physics and astronomy courses at all levels and is involved in physics and astronomy outreach efforts.

**Candidate's Statement:** I would work as an executive committee member to continue and extend the excellent series of plenary talks and joint sessions with other Divisions at the Spring Meeting. What has been so successful with Nuclear Physics and Plasma Physics should be also carried out with Computational Physics, Fluid Dynamics, and indeed nearly all other Divisions. We should especially focus on making astrophysics a pervasive topic at the 1999 Centennial Meeting. Our division is the natural entity to coordinate astronomy education efforts of the AAPT and the AAS Education Office; I would help us take on that role. Finally, I would try to improve communication between the executive committee and the membership, with - at the very least - timely mailings and updated links from the APS pages.

## **Eun-Suk Seo**

**Biographical Information:** Eun-Suk Seo received her Ph.D. from Louisiana State University in 1991 for research carried out primarily at the NASA Goddard Space Flight Center. She is a member of the NASA Cosmic Ray Roadmapping Committee, the NASA Astrophysics Working Group, and the NASA-Republic of Korea Ministry of Science and Technology Investigators' Consultative Group for cooperation in Space

Science. Eun-Suk received a Presidential Early Career Award for Scientists and Engineers in 1997.

**Research Interests:** All aspects of high energy astrophysics, although her research has focused on measurements and interpretation of data related to understanding the origin and acceleration of cosmic rays in supernova shock waves, as well as the interaction of cosmic rays with the heliosphere and the interstellar medium. In parallel with analysis and interpretation of data from the Voyager 1 and 2 spacecraft in the outer heliosphere, Eun-Suk has been involved in several balloon projects to collect data on cosmic ray composition and energy spectra over a wide energy range.

**Candidate's Statement:** In addition to making the Spring Meetings successful, an important role of the Executive Committee must be integrating the community voice. It is important for the Committee to foster effective communication between DAP members and the APS, so that the full voice of our community can be heard. Underrepresented groups, such as young scientists whose future is uncertain due to the changing climate for research support, should be encouraged to participate in all levels of DAP activities. It seems essential that the DAP should strive for more public awareness and active outreach activities that seek to increase research funding for the field. In addition, the DAP should emphasize interdisciplinary connections and contacts with other research areas, in order to make them aware of the opportunities in our field and to give our students broader opportunities.

## For Secretary/Treasurer

### Neil Gehrels

**Biographical Information:** Neil Gehrels is head of the Gamma Ray and Cosmic Ray Astrophysics Branch at NASA's Goddard Space Flight Center where he has been a researcher in high energy astrophysics since receiving his Ph.D. in physics from Caltech in 1981. Other positions and committees include Visiting Professor of Astronomy at University of Maryland in 1995; Chair of High Energy Astrophysics Division of the AAS in 1996-97; Secretary/Treasurer of HEAD in 1991-93; Project Scientist of the Compton Gamma Ray Observatory; Member of the NASA Structure and Evolution of the Universe Subcommittee; Fellow of APS since 1993.

**Research Interests:** High energy astrophysics; gamma-ray astronomy; nuclear astrophysics; gamma-ray bursts; AGN; solid state detectors.

**Candidate's Statement:** The key responsibility of the Secretary is to write the Division Newsletter. I have considerable experience in this area, having composed the AAS/HEAD Newsletter from 1991 to 1993. I am proud to have expanded and considerably improved that newsletter. This is a job I look forward to doing well. The Division of Astrophysics is an excellent organization. I strongly support sustaining the high quality of its membership, annual meeting and invited speaker program.

### James M. Ryan

**Biographical Information:** Jim Ryan received his M.S. in Applied Physics from UC San Diego in 1973 and his Ph.D. in Physics from UC Riverside in 1978. He was a Research Scientist on the Gamma Ray Spectrometer experiment on the Solar Maximum Mission from 1978 to 1982 after which he worked on the COMPTEL experiment on the Compton Gamma Ray Observatory mission. He became a Co-PI on that experiment in 1988. He has published theory papers on solar wind ion composition, solar flare particle transport and solar flare and interplanetary particle acceleration. His experimental publications cover the subjects of atmospheric cosmic-ray measurements, cosmic gamma-ray bursts, cosmic diffuse gamma rays, solar flare gamma-ray measurements, gamma-ray pulsars, AGNs and other phenomenon studied with the COMPTEL instrument. He has also authored general interest articles on solar physics and

other space-related subjects.

**Research Interests:** Solar energetic particles, high energy astrophysics, gamma-ray and energetic particle detector development.

**Candidate's Statement:** The duties of the Secretary-Treasurer are well defined. I intend to execute these duties in an efficient and timely manner. This is essential for a properly functioning Division. Publicizing through the newsletter the activities of the Division and the issues confronting the Division is one of the few ways we have of fostering wide participation of the membership. As a member of the Executive Committee I would do my best to see that the Society and the Division stay out in front of the research and education areas. With the funding situation in a state of flux, I believe that it is important to attempt to engage the entire membership. This is necessary to have our opinions heard and to ensure that science, and particularly astrophysics, has priority on a national level. To accomplish this we must continue to host vibrant and stimulating meetings that encourage research and provide a vehicle for initiating collaborations.

### **1997 Executive Committee**

#### **CHAIR (1997)**

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#### **CHAIR-ELECT (1997)**

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#### **VICE-CHAIR (1997)**

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#### **PAST-CHAIR (1997)**

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#### **SECRETARY-TREASURER (1996)**

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## **Mark Your Calendars:**

### **DAP Business Meeting at April 1998 APS Meeting**

Our annual business meeting is planned for 5:00 April 18th, 1998 immediately following the DAP/DPF session on "High Energy Gamma-rays". Please plan to attend. During this short meeting, the DAP Executive Committee gives you, its members, a brief update on where we stand and what we are doing. More importantly, this is the meeting at which we honor our new Fellows with their certificates. FREE coffee and munchies are served during this meeting! Free coffee is hard to come by at APS meetings. Please drop in, catch up on the centennial plans and other issues, and cheer on our new fellows.

## **Countdown to 1999:**

### **APS Centennial Celebration in Atlanta, GA**

A preliminary planning meeting for the Centennial Meeting was held on Jan. 24 at the APS headquarters. Frank Jones attended on our behalf. A DAP committee (T. Weekes, chair, J. Grindlay, F. Jones and R. Lingenfelter) has been established to plan what our exhibit should be for the Centennial (all APS Divisions have been invited to prepare special exhibits). Surely Astrophysics has one of the most exciting stories to tell to recount our last 100 years ! But we need your help (and 1 or 2 more committee members). PLEASE send your suggestions for themes and even layouts to be considered for this exhibit. We need to prepare something like 10-12 feet of wall space and want to make it not only informative but enticing J. Grindlay.

Please send suggestions to Trevor Weekes ([weekes@egret.sao.arizona.edu](mailto:weekes@egret.sao.arizona.edu)).

## **New APS Fellows**

The following distinguished scientists are our Division's new Fellows of the American Physical Society. They will receive a certificate at the Division of Astrophysics business meeting during the April meeting in Columbus, OH. Please plan to attend this meeting, on Saturday, April 18th at 5:00 PM

**Donald Charles Ellison**  
North Carolina State University

For his pioneering work in applying computer Monte Carlo technique to greatly further understanding of the acceleration of charged particles by astrophysical plasma shocks.

**Joshua Adam Friema**

Fermilab

In recognition of his many contributions in the application of particle physics to early-universe cosmology.

**Jordan A. Goodman**

University of Maryland

For many important contributions to the ground-based studies of high-energy cosmic rays and gamma rays, in particular, the development and utilization of extensive air-shower detectors.

**William F. Hoffman**

University of Arizona

For his pioneering work in the field of balloon-borne far-infrared astronomy and discovery of far-infrared radiation from the Galactic Center; successful construction of the Multi Mirror Telescope (MMT) and application of infrared array technology to astronomy.

**James Daniel Kurfess**

Naval Research Laboratory

For broad contributions to High Energy Astrophysics, including gamma ray observations of solar flares, pulsars, supernovae, discrete and diffuse galactic sources and active galactic nuclei.

**Todor Stefanov Stanev**

University of Delaware

For outstanding contributions to understanding the origin of cosmic rays at ultra-high energies and for pioneering research in the field of neutrino astrophysics

**Gregory Tarle**

University of Michigan

For his innovative work in measuring the antimatter content of cosmic rays and other important research that spans the boundaries of astrophysics, elementary particle physics and nuclear physics.

**Curtis Bruce Tarter**

Lawrence Livermore National Laboratory

For his pioneering research on the physics of photo-ionized plasmas near astrophysical and laboratory x-ray sources and for his leadership of the Lawrence Livermore National Laboratory, maintaining the highest scientific integrity for this major US institution in a time of intense change.

## **Remembering David N. Schramm 1945-1997**

It is with great sadness that we report the loss of an esteemed colleague, David N. Schramm, who died Friday Dec 19, 1997, while piloting his plane to Aspen Colorado to spend Christmas with his family. Professor Schramm was the Louis Block Distinguished Service Professor in the Physical Sciences at the University of Chicago, and since 1995 was also the Vice President for Research at that university. A member of the National Academy of Sciences, David was one of the most influential astrophysicists in the Country. His list of accomplishments is too long to fully recount here. A pioneer in the field of nucleocosmochronology, Schramm attained perhaps his greatest recognition for his work on Big Bang

Nucleosynthesis. Here he helped show early on that deuterium could only be made in the Big Bang, and thus one could use observations of the present-day abundance to constrain fundamental parameters such as the total density of baryons in the universe, and he continued to help develop this field up to the present time. His research interests however were much broader, and his published work spans essentially all areas of astrophysics and cosmology. In addition, as one of the pioneers in particle astrophysics, he was a tireless advocate for research support at the interface of particle physics and astrophysics/cosmology. David was a great supporter of young researchers, and became a mentor to many of the prominent names in astrophysics at universities and laboratories around the world today. His positive attitude and his desire to work on behalf of those around him were famous. In addition, through his popular writings and lectures he helped bring the excitement of astrophysics to a wide general audience. He will be sorely missed by all who knew him, and his loss is a loss for the entire field. He is survived by his wife, Judy, and his two sons Brett and Cary.

Lawrence M. Krauss

## **DAP HomePage**

The DAP's homepage can be found under <http://www.aps.org/units/dap>.

It is a good source of general information about our division and includes items such as this (soon) and past newsletters. The division will continue to upgrade the homepage. We intend, for instance, to add a listing of postdoctoral/faculty/staff openings in astrophysics, as well as a catalog of astrophysics Ph.D. programs that prospective graduate students can consult. Please send suggestions for improvements to any member of the executive committee.