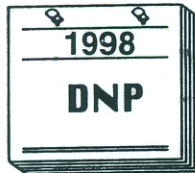




**TO:** Members of the Division of Nuclear Physics, APS  
**FROM:** Benjamin F. Gibson, LANL – Secretary-Treasurer, DNP

**ACCOMPANYING THIS NEWSLETTER:**

- APS/AAPT Spring Meeting DNP Symposia
- DNP Fall Meeting Speaker Nomination Form



**Future Deadlines**

- 1 April 1998 — APS Fellowship Nominations
- 25 April 1998 — Speaker Nominations for Fall Meeting
- 1 July 1998 — Nominations for Bonner Prize
- 1 July 1998 — Nominations for Bethe Prize
- 1 July 1998 — Nominations for Dissertation Award

**WWW Home Page for DNP**

A worldwide web home page for the Division of Nuclear Physics is currently available at "<http://www.phy.anl.gov/dnp/>". Each newsletter is posted on the web, in advance of the copy you receive in the mail. Other information of interest to DNP members, such as deadlines for meetings, prizes, nomination forms, and special announcements are listed there as well. We would like to hear your comments and suggestions. Please send them to Bob Wiringa at "[dnp@theory.phy.anl.gov](mailto:dnp@theory.phy.anl.gov)".

**1. RESULTS OF ELECTION: OFFICERS AND EXECUTIVE COMMITTEE FOR 1998**

By the deadline date of 15 January 1998, 685 properly identified ballots were received for the election of officers and members of the Executive Committee. The results of the election are as follows: R. G. Hamish Robertson was elected as Vice-Chair and Benjamin F. Gibson was elected as Secretary-Treasurer for one-year terms. J. Dirk Walecka was elected Divisional Councilor. Richard Milner, Robert P. Redwine, and John F. Wilkerson were elected to two-year terms on the Executive Committee. The counting of the ballots was done by Tellers Andree Blotz, Anna Hayes, and John Ullmann, and supervised by Rachel Taylor, all of LANL. The members of the 1998 Executive Committee, who assume their duties at the APS/AAPT Spring Meeting, are as follows:

Stuart J. Freedman, UCB/LBNL, Chair (1998)  
Walter F. Henning, ANL, Chair-Elect (1998)  
R. G. Hamish Robertson, U Washington, Vice  
Chair (1998)

Bunny C. Clark, OSU, Past Chair (1998)  
Benjamin F. Gibson, LANL, Secretary-Treasurer  
(1998)  
John Schiffer, ANL, Divisional Councilor  
(December 1999)  
J. Dirk Walecka, College of William & Mary  
Divisional Councilor (December 2001)  
Jolie A. Cizewski, Rutgers (1998)  
Bradley W. Filippone, Caltech (1998)  
Claus-Konrad Gelbke, MSU (1998)  
Richard Milner, MIT-Bates (1999)  
Robert P. Redwine, MIT (1999)  
John F. Wilkerson, U. Washington (1999)

**2. CALL FOR DNP COMMITTEE SUGGESTIONS**

The terms of some of the members of the following DNP committees expire in April 1998: Fellowship, Nominating, Home Page, and Education. Suggestions from the DNP membership for new members of these committees for 1998 are welcome and should be sent to Stuart J. Freedman. A complete list of committee members for 1998 will be published in the August newsletter.

**Inside . . .**

- Bonner, Bethe, Dissertation Award Winners
- 1997 Fellows
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- Call for Prize/Fellow Nominations
- Fall Meeting Returns to Santa Fe
- Electronic First Publication of *Physical Review*
- NSF Undergraduate Research
- New Bates Director
- Annual Reviews Orders
- Future Conferences



### 3. 1998 BONNER PRIZE WINNER

Joel M. Moss of the Los Alamos National Laboratory has been awarded the 1998 Tom W. Bonner Prize in Nuclear Physics. The citation reads:

"For his pioneering experiments using the Drell-Yan process and dimuon production in proton-nucleus collisions which demonstrate that there is no antiquark enhancement in heavy nuclei, and for his experiments on the mass dependence of the production of charmonium and open charm which yield a quantitative description of the parton distribution in nuclei."

### 4. 1998 BETHE PRIZE WINNER

John Bahcall of the Institute for Advanced Study at Princeton has been awarded the 1998 Bethe Prize. The citation reads:

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

### 5. 1998 DISSERTATION AWARD WINNER

Yury G. Kolomensky of the University of Massachusetts, Amherst, has been awarded the 1998 Dissertation Award. The citation reads:

"His experimental work employing spin-dependent deep inelastic scattering has resulted in the most precise determination of the spin-dependent structure functions of the neutron leading to a better understanding of the dynamics of the quarks and gluons inside the nucleon."

### 6. NEW DNP FELLOWS

The following DNP members are newly elected (1997) Fellows of the APS. Please join us in offering congratulations.

*Maria-Ester Brandan*  
*Michael George Fuda*  
*Moshe Gai*  
*Paul Henri Heenen*  
*John W. Lightbody*  
*Keh-Fei Liu*  
*Charles Felix Maguire*  
*Eugene Richard Marshalek*  
*Glen Anderson Rebka, Jr.*  
*Dennis Michael Skopik*  
*Mark Strikman*  
*John Franklin Wilkerson*  
*William A. Zajc*  
*Vladimir G. Zelevinsky*

### 7. JAPAN HADRON FACILITY, T. Fukuda

The JHF Home Page can be found at URL <http://www-jhf.kek.jp/>.

The Accelerator Subcommittee of the Science Council of the Ministry of Education recommended in July that the KEK B-Factory should have first priority in terms of completion and that the JHF should be accorded the first priority "new construction item" in terms

of new accelerators in Japan. Nonetheless, the cabinet decision to shrink the entire budget because of larger government deficits led to a deferral of a decision on the JHF until after the B-Factory is in operation. Funding was provided for an upgrade of the existing KEK proton synchrotron, which includes essential accelerator components required by the JHF. First JHF beam, if all goes well, is anticipated in 2004.

A mini-workshop on the topic of Low-Energy Spin-Polarized Radioactive Nuclear Beams was held at the KEK Tanishi branch in July, to look into production methods and monitoring techniques for energies in the range from 0 to 1 MeV/u now available at the prototype E-arena. Abstracts of the workshop can be obtained as a JHF report (JHF-97-5). The Accelerator Advisory Committee (AAC) for JHF accelerator design was held at KEK on October 13 and 14, 1997. The committee focused on issues related to the feasibility of the design and consistency with performance requirements plus new investigations and innovations, such as PISL in the RFQ, an imaginary gamma-transition lattice, and magnetic alloy for RF cavity and impedance compensation.

An International Workshop on JHF Science (JHF98) will be held March 4-7, 1998, in Tsukuba at the High Energy Accelerator Research Organization (KEK). The workshop will discuss JHF scientific program possibilities as well as how to improve the present facilities plan. In particular, the organizers will work to complete a preliminary, realistic design of the facilities (including beam lines, detectors, etc.), which meet the requirements of the scientific program formulated in this workshop. The workshop will consist of plenary and parallel sessions. Plenary sessions will include keynote talks to review the central issues of the field and highlight prospects for the JHF. Parallel sessions will be dedicated to discussion of scientific programs and facility design for each of the 'arenas' (K, N, M, and E).

#### (1) K-arena:

- (a) kaon and muon rare decays
- (b) neutrino physics
- (c) strangeness nuclear physics
- (d) physics with primary beams
- (e) hadron spectroscopy and physics with anti-protons and anti-nuclei

#### (2) N-arena:

- (a) target technology

#### (3) M-arena:

- (a) next-generation  $\mu$ SR experiments

#### (4) E-arena:

- (a) nuclear astrophysics
- (b) fundamental and nuclear physics with ISOL-based RNB
- (c) material science
- (d) post accelerators
- (e) production targets and ion sources

The organizing committee welcomes participation of all who are interested in JHF science. Correspondence concerning the workshop should be addressed to the workshop secretariat: Dr. Shin'ya Sawada ([jhfp98@jhfpcl.kek.jp](mailto:jhf98@jhfpcl.kek.jp)).



In order to receive the zzJHF Newsletter regularly, subscribe via a listserver by sending an e-mail to:

jhf\_listserv@mail-jhf.kek.jp

and include the one-line sentence: subscribe JHFNews Firstname Lastname.

## 8. THE APS/AAPT SPRING MEETING IN COLUMBUS, OH, 18-21 APRIL 1998

The 1998 APS/AAPT Spring Meeting will be held in Columbus, OH, April 18-21, *Saturday through Tuesday*. The Division of Nuclear Physics will organize five sessions of invited papers. One will be the DNP Prize Session: Bonner Prize, Bethe Prize, Dissertation Award, and Maria Goeppert-Mayer Award. The 1997 Program Committee arranged two sessions at its 5 October Whistler meeting: 1) "Recent Results from Modern Electromagnetic Facilities/Detectors" (E. Kinney on Nucleon Spin Structure from HERMES, P. Markowitz on First Results on Electroproduction of  $\omega$  Vector Mesons, J. McIntyre on Physics with Focal Plane Polarimeters at MIT-Bates and Jefferson Lab, and A. Ahmidouch on Results from the  $t_{20}$  Experiment at Jefferson Lab); 2) "Have We Seen the Quark-Gluon Plasma?" (D. Kharzeev on  $J/\Psi$  Suppression: Quark Gluon Plasma, Hadron Gas, or ?, J. Wurm on Experimental Results on Low and Intermediate Mass Lepton Pairs, V. Koch on Intermediate Mass Lepton Pairs, Hadron Mass Shifts, and the Nuclear Medium). Two additional sessions will be chosen by ballot of the Program Committee from nominations submitted by the DNP membership. Joint invited speaker sessions will be arranged with the Division of Astrophysics, the Division of Beam Physics, the Division of Particles and Fields, the Precision Measurements and Fundamental Constants Topical Group, and the Few-Body Systems Topical Group.

Mini-symposia (focused sessions of contributed papers led by an invited talk designed to summarize the topic and highlight important issues and open questions) are being organized in five areas. The sorting categories, topics, and Program Committee organizers are:

- 11a Mini-symposium on "Nuclear Physics with Gammasphere" (Jerry Garrett and Lee Riedinger)
- 11b Mini-symposium on "Nonrelativistic QCD" (Roxanne Springer)
- 11c Mini-symposium on "The Nuclear Liquid-Gas Phase Transition" (Gary Westfall)
- 11d Mini-symposium on "Magnetic Rotation in Nuclei" (David Fossan)
- 11e Mini-symposium on "Current Issues in Light Front Field Theory and Phenomenology" (Roxanne Springer)

The Columbus Meeting will feature an experimental format for general meetings. The early morning of the first three days will be devoted to plenary sessions. Please come and evaluate the experiment. The plenary sessions will be:

### *Saturday, April 18*

- "Recent Measurements of Cosmological Parameters," Wendy Freedman (Carnegie Observatories, Santa Barbara)
- "Gamma Ray Bursters: Dying cries from the distant universe," Shri Kulkarni (Caltech)
- "The Hidden Curriculum: What do we really want our students to learn?," Joe Redish (Maryland)

### *Sunday, April 19*

- "High  $T_c$  Superconductors and Their Applications," Laura Greene (Univ. Illinois)
- "Breaking the Electroweak Symmetry: Why it has to happen and its implications," Jonathan Bagger (Johns Hopkins)
- "Advanced Accelerator Concepts," Bob Siemann (SLAC)

### *Monday, April 20*

- "Current Evidence Regarding the Quark Gluon Plasma," Berndt Mueller (Duke)
- "Laser Cooling of Atomic States," William Phillips (NIST)
- "Physical properties of DNA," Steve Chu (Stanford)

## 9. SPRING MEETING WORKSHOPS

DNP-style workshops will be held on Friday, April 17, preceding the APS/AAPT spring meeting (April 18-21, 1998). The workshops will be all-day affairs, starting at 9:00 a.m. Below are short summaries of those for which we have information. (Organizers are listed in brackets.) More details will be available in APS Meeting News and on the web version of the spring meeting program.

- 1) Decay of Hot and Dense Nuclear Matter: A Systematic View [T. Humanic, M. Lisa, and E. Sugarbaker]

The theme of this workshop will examine how observables commonly extracted from relativistic heavy-ion collisions (e.g., transverse mass distributions, flow parameters, HBT, ...) depend upon kinematical variables such as beam energy, projectile-target mass, and produced-particle mass and how these dependencies constrain the early hot, dense stage of the collision. The program will include speakers from a representative series of experiments at the Bevalac, AGS, and SPS, as well as theoretical talks concerned with the connection between the systematics of measured observables and the early stage of the collision.

- 2) Lattice QCD and the Standard Model [John Donoghue, Gregory Kilcup, and Junko Shigemitsu]

In an increasing number of areas, lattice QCD can make useful contributions to Standard Model phenomenology. This workshop will bring together phenomenologists and lattice gauge theorists working on these common problems. Topics will include the determination of quark masses, heavy quark spectroscopy, form factors, kaon physics, and related subjects.

- 3) Soft QCD [Les Bland, John Cameron, Bunny Clark, Robert Perry, and Allena Opper]

Quantum Chromodynamics (QCD) is accepted as the fundamental theory of the strong interaction. Although it is well tested in "hard scattering," it has little predictive power for low-energy ("soft") processes, where the theory's coupling constant is large. It is exactly this domain that is relevant for an understanding of hadrons and systems of hadrons (such as atomic nuclei). The recent focus of "soft" strong-interaction studies has shifted to the mapping of the structure of hadrons and to the understanding of the dynamics of interacting baryon/meson systems. This workshop will provide current perspectives and a future outlook on "soft QCD."



- 4) The Five Fundamental Parameters of Cosmology  
[Andy Gould, Barbara Ryden, Gary Steigman, Terry Walker,  
and David Weinberg]

Cosmology is becoming an increasingly data driven science with the connections between particle physics and cosmology strongest where the most data exist. Our workshop unites observers and theorists to discuss five important cosmological observables: the total mass density and baryonic mass density of the Universe, the cosmological constant, the Hubble constant, and the spectrum of initial density perturbations.

#### 10. NOMINATION FOR THE 1999 BETHE PRIZE IN NUCLEAR PHYSICS AND ASTROPHYSICS

This annual prize was established in 1996 by friends, students, and associates of Hans A. Bethe and announced at Bethe's 90th birthday celebration at Cornell. Previous prize winners are: J. Bahcall.

The purpose of the prize, which currently consists of \$7500 and a certificate citing the recipient's contributions, is "*To recognize outstanding work in theory, experiment, or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics or closely related fields.*"

The award is to be made to one individual for outstanding accomplishments in the areas of astrophysics, nuclear physics, nuclear astrophysics, or closely related fields. It is open to any scientist working in these areas, worldwide. No time limits are set on when the work was done.

Nominations remain active for three years. It is extremely helpful for the committee to receive additional letters of support that detail the contributions of the nominee and the impact these contributions have had on the field. It is also appropriate to submit material such as significant articles that might help the committee evaluate the nominee's contribution. While general statements concerning the value of the nominee's work are important, specific information defining what the nominee has contributed and how this contribution has impacted the field is needed.

Send name of proposed candidate and supporting material before **1 July 1998** to: Prof. Virginia Trimble, Astronomy Department, University of Maryland, College Park, MD 20742 (vtrimble@astro.umd.edu).

#### 11. NOMINATION FOR THE 1999 TOM W. BONNER PRIZE IN NUCLEAR PHYSICS

This annual prize was established in 1964 as a memorial to Tom W. Bonner by his friends, students and associates. Previous winners are: H. H. Barschall, R. J. Van de Graaff, C. C. Lauritsen, R. G. Herb, G. Breit, W. A. Fowler, M. Goldhaber, J. D. Anderson and D. Robson, H. Feshbach, D. H. Wilkinson, C. S. Wu, J. P. Schiffer, S. T. Butler and G. R. Satchler, S. Polikanov and V. M. Strutinsky, Roy Middelton and W. Haeberli, R. M. Diamond and F. S. Stephens, B. L. Cohen, G. E. Brown, C. D. Goodman, H. A. Enge, E. G. Adelberger, L. M. Bollinger, B. Frois and I. Sick, R. H. Davis, E. M. Henley, V. W. Hughes, P. Twin, H. G. Blosser and R. E. Pollock, A. Arima and F. Iachello, E. K. Warburton, F. Boehm, J. D. Walecka, R. G. H. Robertson, and J. M. Moss.

The purpose of this prize, which currently consists of \$5,000 and a certificate citing the recipient's contributions, is "*To recognize and encourage outstanding experimental research in nuclear physics, including the development of a method, technique, or device that significantly contributes in a general way to nuclear physics research.*"

Nominations are open to physicists whose work in nuclear physics is primarily experimental, but a particularly outstanding piece of theoretical work will take precedence over experimental work. There are no time limitations on when the work was performed. The prize shall ordinarily be awarded to one person but a prize may be shared among recipients when all the recipients have contributed to the same accomplishment(s).

Nominations remain active for three years. It is extremely helpful for the committee to receive additional letters of support that detail the contributions of the nominee and the impact these contributions have had on the field. It is also appropriate to submit material such as significant articles that might help us evaluate the nominee's contribution. While general statements concerning the value of the nominee's work are important, we must have specific information that allows us to determine what the nominee has contributed and how this contribution has impacted the field.

Send name of proposed candidate and supporting material before **1 July 1998** to: Prof. Peter Paul, Department of Physics, SUNY-Stony Brook, Stony Brook, NY 11794-3800 (paul@nuclear.physics.sunysb.edu).

#### 12. NOMINATIONS FOR THE 1999 DISSERTATION AWARD IN NUCLEAR PHYSICS

The now annual prize, which recognizes a recent Ph.D. in nuclear physics, was established in 1985 by members and friends of the Division of Nuclear Physics of the APS. Previous winners are: B. Sherrill and W. J. Burger, Thomas E. Cowan, Michael J. Musolf, James Edward Koster, Zhiping Zhao, Greg Schmid, and Yury G. Kolomensky.

**Nature:** The award consists of \$1000 and an allowance for travel to the annual Spring Meeting of the Division of Nuclear Physics of the American Physical Society at which the award will be presented.

**Rules and Eligibility:** Nominations are open to any person who has received a Ph.D. degree in experimental or theoretical nuclear physics from a North American university within the two-year period preceding 1 September 1998.

Send before **1 July 1998** the nomination of the proposed candidate, an up to four page summary of the thesis research, a statement of his/her contribution to the research as well as that of others and a letter of support from the physicists who are familiar with the candidate and the research. To expedite the process, copies of the thesis should be made available for the five committee members. These materials are required for each nominee and should be sent to Prof. S. J. Freedman, Department of Physics, 366 Le Conte Hall, University of California, Berkeley, CA 94720.

#### 13. NOMINATIONS FOR APS FELLOWSHIP

The procedure for the election of a Member to Fellowship is outlined in the Membership Directory of the APS under "Constitution and



Bylaws." A nomination form, which cites the principal contributions of the candidates to physics, should be prepared and signed by two members of the society. The total number of members who could be elected to Fellowship in a given year is one half of one percent of the total APS membership.

The DNP deadline is normally 1 April. Nomination forms are available from Peggy Mendoza, The American Physical Society, One Physics Ellipse, College Park, MD 20740-3843. Completed forms should be returned to Dr. J. Franz at the same address. Information can also be found on the APS home page (<http://www.aps.org>); click on the word fellowship. The nomination form can also be downloaded.

The 1998 DNP Fellowship Committee is comprised of L. L. Riedinger (Chair), A. B. Balantekin, C. Glashauser, R. F. Casten, and S. J. Seestrom. The Fellowship Committee reviews the nominations for APS Fellowship referred to the DNP and recommends a slate of candidates, which is forwarded to the APS Fellowship Committee and then to the APS Council for approval.

It is particularly important for nominators to ensure that the cases that they prepare for the Fellowship Committee are well documented. In addition to that requested on the nomination form, information such as lists of invited talks, awards, professional activities, committee services, and participation in organization of conferences is very helpful. Inclusion of a complete publication list is highly recommended.

The DNP has adopted the following Fellowship Criteria Guidelines. To be chosen as a Fellow, an APS member should have a record of excellence in research that has been sustained over several years, and have done at least one major, original work that has influenced his/her specialty in a significant way.

The list of APS Fellows (by APS subunit) elected in a given year is published in the March issue of *APS News*. The names of newly elected DNP Fellows are published in the February Newsletter and the awards are presented at the DNP Business meeting of the Spring APS meeting.

#### 14. DNP FALL MEETING IN SANTA FE, NM, 28-31 OCTOBER 1998

The Annual Fall Meeting of the Division of Nuclear Physics of the American Physical Society will be held October 29-31, 1998 in Santa Fe, New Mexico. Three associated topical workshops will be held on October 28. Santa Fe is a popular destination because of its colorful, international style and location in the scenic mountains of northern New Mexico. During the fall season the weather is variable, with high temperature typically 63°F and low about 38°F.

The Conference sessions will be held at the Sweeney Convention Center (201 Marcy Street), convenient to the historic downtown plaza. Rooms have been blocked at a number of hotels located within walking distance of the Convention Center. The 1988 and 1992 Santa Fe meetings set attendance records. Because Santa Fe is a popular destination during the fall, it is recommended that hotel reservations be made early. A hotel reservation form, to be sent to the Santa Fe Convention and Visitors Bureau, will appear in APS Meeting News and accompany the May Newsletter.

Three workshops will be held in conjunction with the meeting. "*Physics with the Relativistic Heavy Ion Collider*," is being

organized by J. Simon-Gillo, J. Sullivan, H. van Hecke, D. Fields, D. Strottman, W. Kinnison, and M. Brooks; "*The Spin-Flavor Structure of the Nucleon*" is being organized by A. Blotz, G. Garvey, J. Ginocchio, and J. Moss; "*New Opportunities for Nuclear Physics with Spallation Neutron Sources*", organized by R. Haight, W. Tornow, J. Becker, P. Herczeg, and S. Wender. The workshops will run in parallel, and a registration fee of \$30 will be charged.

A "Teachers Day" will be held on the last day of the conference, organized by A. Palounek. Suggestions for speakers for high-school level talks are welcomed.

The local organizing committee consists of T. J. Bowles, J. D. Bowman, G. T. Garvey, C. M. Hoffman, M. B. Johnson, J. N. Ginocchio, W. C. Louis, J. E. Simon-Gillo, and S. J. Seestrom (Chair).

The advance registration and hotel deadline is September 25, 1998. For meeting information please contact Susan Ramsay, Conference Secretary, DNP98, Mail Stop H846, Los Alamos National Laboratory, Los Alamos, New Mexico 87545. Email can be sent to [DNP98@lanl.gov](mailto:DNP98@lanl.gov).

#### 15. DNP TEACHERS DAY, B. C. Clark

With support from the APS the DNP97 (Whistler) local organizing committee sponsored a Teachers Day at TRIUMF on October 9, 1997, immediately following the DNP fall meeting. More than 30 teachers and students participated. The day began with a tour of TRIUMF and was followed by refreshments and a discussion of the TRIUMF research program led by Jean-Michel Poutissou. Students and teachers were served lunch at the University of BC Gold Course, where DNP Education Chair, Peggy McMahan, described the Nuclear Science Wallchart and Wallchart Booklet as well as handed out 11"x15" Wallchart drafts.

#### 16. FUTURE DNP FALL MEETINGS

1998	October 28-31	Santa Fe, NM
1999	October 13-17	Asilomar, CA
2000	October	Williamsburg, VA

The dates include the Wednesday "workshops," which are held in conjunction with the DNP Fall Meetings. Holding "workshops" at the DNP Fall Meetings is a tradition that began with the 1986 Vancouver meeting. All meeting attendees are welcome and encouraged to come. It has been the intention of the DNP Executive Committees that these "workshops" should have broad appeal, with introductory pedagogical talks for the benefit of those who have come primarily for the DNP meeting but want to take the opportunity to learn about a field of specialty of the local community.

#### 17. FUTURE APS SPRING MEETING INFORMATION

1999	March 20-26	Atlanta, GA
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The 1999 Centennial celebration will be held 20-26 March in Atlanta. The first two days will be devoted to formal celebrations. The 22-26 March dates will correspond to an annual spring meeting. The year-long centenary celebration will begin in the fall of 1998



and continue until the summer of 1999. The APS contact for the Centennial celebration is Franmarie Kennedy; the chair of the DNP Centennial Committee is J. Dirk Walecka.

## 18. EMAIL ADDRESS INFORMATION REQUESTED

The APS membership directory is now online through the APS Web site (<http://aps.org>). Check your own address information — name of the service (directory) and the password (F=ma) are case sensitive.

Most importantly, update your email address. Of the 2496 DNP members, 2223 have registered their email addresses in the APS directory database. Despite being computer literate authors — some 85% of the submissions to *Phys. Rev. C* are compuscripts — DNP members do not outshine their fellow APS members in registering their email addresses.

Membership information can be updated by sending an email message to "membership@aps.org" or directly on the Web.

## 19. ELECTRONIC PUBLICATION OF PHYSICAL REVIEW

The physics community, particularly in the fields covered by *Physical Review C* and *D*, has become increasingly accustomed to accessing the current literature electronically. In keeping with this trend, *Physical Review D* is changing its production process so that all articles will be first published electronically, with the printed version appearing at a subsequent date. As at present, the printed and on-line versions will be visually identical. This new process began with the articles in Volume 57 (the January–June 1998 print issues).

In making this change, *Physical Review D* is moving from a batch mode that focused on the production of an entire printed issue to one that allows each article to be published as soon as it is ready. A few days after approval of the proofs has been received from the authors, the article will be posted as part of the electronic journal (<http://publish.aps.org/PRDO/prdohome.html>), with the date of posting being listed as the publication date of the article. At monthly intervals these articles will be collected to make the printed issue that will appear, according to the same division by subject area as at present, on the 1st and 15th of each month.

In a six-month transitional phase, full citation information (volume and page number) will only be available when all of the articles corresponding to a given print issue have been posted. Beginning with the first issue of Volume 58 (print date 1 July 1998), THAT WILL CHANGE to a citation scheme based on volume and article number, with the article number being assigned at the time that the article is published electronically. Articles will then be fully citable as soon as they appear in the on-line journal. In the printed journal, articles will be ordered by increasing article number; the algorithm for assigning these numbers has been designed so that articles will be ordered by topic within each printed issue, as is currently done.

There are two important implications of this change about which authors should be aware. First, because articles will be published electronically as soon as they are ready, authors can reduce the time from acceptance to publication by carefully preparing and proofreading their manuscript, submitting it electronically, and responding promptly after receiving the page proofs. Second, because the on-line version will be considered the final published version, with the subsequent printed version simply a reproduction

of the on-line version, authors will not be able to make any corrections to the article after the page proofs have been returned; instead, any further corrections must be made by submitting an erratum.

*Physical Review C* may follow the electronic first publication approach shortly. Comments pro and con about this change should be directed to the *Physical Review C* Editor, Sam M. Austin. In particular, your views are solicited on the new page numbering scheme as well as whether articles should be frozen before the end of the month collection for the printed issue.

## 20. BUDGET UPDATE FROM THE AD HOC COMMITTEE ON NUCLEAR PHYSICS FUNDING, L. L. Riedinger, Chair

The FY98 appropriations bills for the current fiscal year were finalized in November and contain science budgets generally better than requested a year ago by the Clinton Administration. The National Science Foundation received a 5% increase over FY97 to \$3.429B, compared to a requested 3% increase. The appropriation included a 5% increase for Research and Related Activities (to \$2.546B). In the Department of Energy, the requested budget for nuclear physics was flat in actual dollars at \$315.9M, but the Congress appropriated an extra \$5M.

The increases provided by Congress are in line with an increased emphasis on the federal support of basic research in the sciences. On October 22, 1997, U.S. Senators Gramm (R-TX) and Lieberman (D-CT) introduced Senate bill 1305, the National Research Investment Act of 1998. This bill would authorize (but not yet appropriate) funds to double federal spending on basic research over the next 10 years. Over 100 scientific organizations (including the American Physical Society) issued last October a Unified Statement on Research (see [http://aps.org/public\\_affairs/popa/decade.html](http://aps.org/public_affairs/popa/decade.html)), which also makes the case for doubling spending on research. So far, New Mexico Senators Domenici and Bingaman have joined S. 1305 as cosponsors in a bipartisan effort to build support for increased funding of science. These four senators have issued a recent call for other cosponsors of this bill (see FYI #8, at <http://webster.aip.org/enews/fyi/1998/>), and the APS is asking physicists to urge their home-state senators to join S. 1305 as cosponsors. One can get their senators addresses, fax numbers, etc. from the web site "Contacting the Congress" (<http://www.visi.com/juan/congress/>).

Attention is now turned to the Administration's budget request for FY99, submitted to Congress around February 2. At this point there is speculation of a 3.5% increase for DOE nuclear physics over the appropriated amount (\$320.9M) in FY98. This would help the field a great deal, but would still leave us around 3.5% short of the lower limit of the budget guidance given to us as we wrote the 1996 Long Range Plan. The anticipated FY99 increase would certainly allow more effective utilization of the fine facilities that have been built or are being constructed. But, another such increase is needed to bring the DOE part of the field up to the level intended a few years ago.

## 21. NSF UNDERGRADUATE RESEARCH, R. Sinclair

A principal way in which the National Science Foundation supports the participation of undergraduates in research is through the "Research Experiences for Undergraduates ('REU') Program." This Program supports several hundred groups ("Sites") each summer in a



variety of departments and laboratories in all fields of science, mathematics, and engineering. Each group consists of (typically) ten or more undergraduates, each of whom is assigned to some aspect of the on-going research of the institution.

The NSF Divisions of Physics, Material Research, and Astronomy between them support over a hundred such Sites throughout the country. The research topics vary between Sites, but they all include topics of interest to members of many of the APS Divisions and Topical Groups and the AAS Divisions (and their students). Application deadlines are usually in February or March each year. Interested students should inquire directly of each Site for application procedures and for information on the research topics available.

The list of REU Sites for Physics, Materials, and Astronomy is at <http://www.nsf.gov/home/crssprgm/reu/reupma.htm>. The complete list of all REU Sites can be found at <http://www.nsf.gov/home/crssprgm/reu/start.htm>. Students are encouraged to inspect the entire list since some Sites in a number of fields (such as Biology, Chemistry, Computer and Information Science, Engineering, and Geology) often have components of research of interest to physics and astronomy students.

## 2.2. NEW BATES DIRECTOR NAMED

The Dean of Science at MIT, Robert Birgeneau, has announced that Professor Richard Milner of MIT has been chosen as the next Director of the Bates Linear Accelerator Center, with his term to begin July 1, 1998. In reaching this decision, Professor Birgeneau was advised by a committee which included significant representation from the Bates user group. Milner is well-known for his studies of few body systems, especially using polarization and/or internal targets. He recently completed a two year period as spokesperson of the HERMES experiment at DESY.

Professor Birgeneau thanked the current Bates Director, Professor Stanley Kowalski of MIT, for his many important contributions to the Bates scientific program over the years.

## 2.3. ANNUAL REVIEWS OF NUCLEAR AND PARTICLE SCIENCE

The Division has continued the agreement with Annual Reviews, Inc., which will enable DNP members to obtain copies of the "Annual Review of Nuclear and Particle Science" at a 30% discount when purchased through the DNP Secretary-Treasurer, Benjamin F. Gibson, Los Alamos National Laboratory, DNP, MS B283, Los Alamos, NM 87545.

**1998 Prices:** The dual prices (separated by a slash) listed below correspond to USA/other countries including Canada. Volumes 12-29 and 31-41 are \$55/\$60 retail and \$38.50/\$42 for DNP members. Volumes 42 and 43 are \$59/\$64 retail and \$41.30/\$44.80 for DNP members. Volumes 44 and 45 are \$62/\$67 retail and \$43.40/\$46.90 for DNP members. Volume 46 is \$67/\$72 retail and \$46.90/\$50.40 for DNP members. Volumes 47 and 48 are \$70/\$75 retail and \$49/\$52.50 for DNP members.

Other Annual Reviews series publications are also available. A complete listing of topics and authors for the current volumes and back volumes of Annual Reviews publications may be viewed on the Annual Reviews Web Site at <http://www.AnnualReviews.org>. The Web Site also features a fully searchable abstracts data base for all

Annual Reviews publications, which allows visitors to search by author name or key words.

Payment (payable to the Division of Nuclear Physics-APS) must accompany your order and must be in U.S. funds. California orders must add applicable sales tax. *Since 1 January 1991, all orders shipped to Canada require the addition of a 7% General Sales Tax (Reg. #121449029 RT).*

## 2.4. FUTURE CONFERENCES

Organizers of future conferences should contact the DNP Secretary-Treasurer if they wish their conferences listed in DNP newsletters.

**"International Workshop on JHF Science" (JHF98),** 4-7 March 1998, at the High Energy Accelerator Research Organization (KEK) in Tsukuba, Japan. Contact: Dr. Shin'ya Sawada, JHF Project Office, High Energy Accelerator Research Organization (KEK), Oho 1-1, Tsukuba, Ibaraki, 305 Japan. Telephone: 81-298-64-5680, Fax: 81-298-64-5258, email: [jhfp98@jhfpcl.kek.jp](mailto:jhf98@jhfpcl.kek.jp).

**"Workshop on Future Directions in Quark Nuclear Physics,"** 10-20 March 1998, Special Research Centre for the Subatomic Structure of Matter and the National Institute for Theoretical Physics, University of Adelaide, Australia. Contact: Dr. K. Tsushima, email: [ktsushima@physics.adelaide.edu.au](mailto:ktsushima@physics.adelaide.edu.au), WWW: [http://www.physics.adelaide.edu.au/cssm/workshops/QNP\\_98.html](http://www.physics.adelaide.edu.au/cssm/workshops/QNP_98.html).

**"Workshop in Hadron Physics in the 21st Century,"** 27-29 March 1998, The George Washington University Virginia Campus, Ashburn, Virginia. Contact: William J. Briscoe, Telephone: 703-729-8340, Fax: 703-729-8248, email: [briscoe@gwis2.circ.gwu.edu](mailto:briscoe@gwis2.circ.gwu.edu), WWW: <http://WWW.GWU.EDU/~CNS>.

**"Second Workshop on Electronuclear Physics with Internal Targets and the BLAST Detector,"** 28-30 May 1998, Massachusetts Institute of Technology, Cambridge, MA. Scientific Program Contact: Richard Milner, MIT, Telephone: 617-258-5439, Fax: 617-258-5440, Email: [milner@mitlns.mit.edu](mailto:milner@mitlns.mit.edu). Workshop Coordinator: Sheila Dodson, MIT Bates Linac, P.O. Box 846, Middleton, MA 01949, Telephone: 617-253-9290, Fax: 617-253-9599, Email: [sheila@bates.mit.edu](mailto:sheila@bates.mit.edu), WWW: <http://mitbates.mit.edu/~blast/workshop/>.

**"Fifth International Symposium on Weak and Electromagnetic Interactions in Nuclei, WEIN'98,"** 14-21 June 1998, Santa Fe, New Mexico. Contact: Conference Secretary WEIN'98, MS H844, Los Alamos National Laboratory, Los Alamos, NM 87545, Telephone: 505-665-1819, Fax: 505-665-6943, email: [WEIN98@lanl.gov](mailto:WEIN98@lanl.gov).

**"The Second International Conference on Exotic Nuclei and Atomic Masses,"** 23-27 June 1998, Shanty Creek Resort, Bellaire, Michigan. Organizers: Cary Davids ([davids@anl.gov](mailto:davids@anl.gov)), Brad Sherrill ([sherrill@nscl.msu.edu](mailto:sherrill@nscl.msu.edu)), WWW: <http://www.nscl.msu.edu/conferences/ENAM98>.

**Workshop on "Applications of High-Precision Gamma-Spectroscopy,"** 1-3 July 1998, University of Notre Dame, Notre Dame, IN. Organizers: Ani Aprahamian (Notre Dame) and Michael Jentschel (Institute Laue Langevin). Contact: Dr. Ani Aprahamian, Department of Physics, University of Notre Dame, Notre Dame, IN



46556, Telephone: 219-631-8120, Fax: 219-631-5952, email: [aprahamian.1@nd.edu](mailto:aprahamian.1@nd.edu), WWW: <http://www.nd.edu/~gammawrk>.

**“Fifteenth International Conference on the Application of Accelerators in Research and Industry,”**  
4–7 November 1998, University of North Texas, Denton, TX.  
Contact: Barbie Stippec, P.O. Box 305370, Denton, TX 76203-5370, Telephone: 940-565-3252, Fax: 940-565-2227, e-mail: [stippec@unt.edu](mailto:stippec@unt.edu), WWW: <http://www.phys.unt.edu/accelcon/>.

**KEK-Tanashi International Symposium on “Physics of Hadrons and Nuclei,”** 14–17 December 1998, Hongo Campus of the University of Tokyo, sponsored by KEK-Tanashi and the JSPS. Contact: Prof. Osamu Morimatsu, High Energy Accelerator Research Organization (KEK), Tanashi Branch, 3-2-1 Midori-cho, Tanashi, Tokyo 188, Japan, Telephone: 81-424-69-9534, Fax: 81-424-62-0763, e-mail: [osamu.morimatsu@kek.jp](mailto:osamu.morimatsu@kek.jp)

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