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

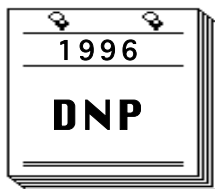
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**ACCOMPANYING THIS NEWSLETTER:**

- A ballot for the nomination of DNP Officers and Executive Committee
- Bethe Prize Donation Form
- List of Bethe Prize Donors

**2-5 OCTOBER DNP MEETING,  
CAMBRIDGE, MA**

- A pre-registration form, including workshops and banquet
- A housing form + Map
- A poster
- Abstract submission instructions



**Future Deadlines**

- **23 June 1996** - User Group Deadline in order to appear in the October Bulletin (see item 9)
- **28 June 1996** - Contributed Abstracts for the Cambridge Fall Meeting (see item 9)
- **30 June 1996** - Nomination Ballot for DNP Elections (see item 3)
- **1 July 1996** - Nominations for 1997 Bonner Prize (see item 5)
- **16 Aug 1996** - Housing deadline for Cambridge Meeting
- **16 Sept 1996** - Last day for Cambridge "Special" Pre-registration rates

**1. DNP COMMITTEES**

**Executive Committee**

Lee. L. Riedinger, Tennessee, **Chair** (1997)  
Bunny C. Clark, OSU, **Chair-Elect** (1997)  
Stuart J. Freedman, UCB & LBL, **Vice-Chair** (1997)  
J. Dirk Walecka, W&M and CEBAF, **Past Chair** (1997)  
Benjamin F. Gibson, LANL, **Secretary-Treasurer** (1997)  
Virginia R. Brown, NSF, **Past Secretary-Treasurer**  
Peter Paul, SUNY at Stony Brook, **Division Councillor** (December, 1997)

John P. Schiffer, ANL, **Division Councillor** (December, 1999)  
Thomas J. Bowles, LANL (1998)  
Richard N. Boyd, OSU (1997)  
Barbara V. Jacak, LANL (1997)  
Cathleen E. Jones, JPL (1998)  
Joseph I. Kapusta, Minnesota (1997)  
Berndt Mueller, Duke (1998)

### Program Committee

B. C. Clark, OSU (**Chair**)  
S. J. Freedman, UCB & LBL (**Vice-Chair**)  
L. L. Riedinger, Tennessee (**Past-Chair, 1995**)  
J. D. Walecka, W&M and CEBAF (**Past-Chair, 1994**)  
B. F. Gibson, LANL (**Secretary-Treasurer**)  
V. R. Brown, LLNL (**Past Secretary-Treasurer**)  
D. H. Beck, Illinois  
J. A. Becker, LLNL  
M-E. Brandan, UNAM, Mexico (CAM97 Liaison)  
S. Capstick, FSU  
U. Garg, Notre Dame  
J. W. Harris, UCB & LBL  
T. K. Hemmick, SUNY at Stony Brook  
D. J. Millener, BNL  
B. V. Jacak, LANL  
T. L. Khoo, ANL  
R. P. Redwine, MIT  
R. Roy, Laval (CAM97 Liaison)  
D. M. Skopik, Saskatchewan  
M. S. Smith, ORNL  
R. P. Springer, Duke  
M. R. Strayer, ORNL  
M. B. Tsang, NSCL  
W.T.H. van Oers, Manitoba  
J. F. Wilkerson, Washington  
S. W. Wissink, IUCF  
W. A. Zajc, Columbia

### 1997 Bonner Prize Committee

M. Musolf, INT, Seattle (**Chair**)  
J. B. Ball, ORNL  
J. D. Walecka, CEBAF & Wm. & Mary

N. Benczer-Koller, Rutgers  
J. W. Harris, UCB & LBL

### 1997 Fellowship Committee

V. R. Brown, NSF (**Chair**)  
J. H. Hamilton, Vanderbilt  
B. Mueller, Duke  
A. B. Balantekin, Wisconsin  
C. Glashauser, Rutgers

### 1996 ad-hoc Committee on Education

P. Cottle, FSU (**Chair**)  
N. Benczer-Koller, Rutgers  
J. Carr, FSU  
C. Olmer, Indiana  
P. Rutt, Rutgers  
C. Stone, San Jose State

### 1996 Nominating Committee

S. Seestrom, LANL (**Chair**)  
R. D. McKeown, Caltech  
J. P. Schiffer, ANL  
K. T. Lesko, UCB & LBL  
T. Cohen, Maryland

### 1996 Committee on APS Committees

S. J. Freedman, UCB & LBL (**Chair**)  
E. J. Beise, Maryland  
R. N. Boyd, Ohio State  
J. I. Kapusta, Minnesota

### 1996 Ad Hoc Committee on the Funding of Nuclear Physics

L. L. Riedinger, Tennessee (**Chair**)  
B. C. Clark, OSU  
J. Cameron, IUCF  
H. A. Grunder, CEBAF  
E. M. Henley, Washington  
W. F. Henning, ANL  
N. P. Samios, BNL

### 1996 Nuclear Science Resources Committee

L. L. Riedinger, Tennessee (**Chair**)  
J. G. Cramer, Jr., Washington  
G. M. Crawley, MSU  
J. Finck, Central Michigan  
R. Hahn, BNL  
L. S. Schroeder, UCB and LBL

R. Whitney, CEBAF

*Appointments of members to DNP committees are for one- or two-year terms. Division Councillors are elected for four-year terms. Executive Committee dates correspond to the end of the term following the Spring Meeting except for Division Councillors as indicated.*

## 2. NOMINATION OF OFFICERS AND EXECUTIVE COMMITTEE FOR 1997

The terms of the officers and three members of the present Executive Committee will expire at the close of the regular meeting of the Division to be held in conjunction with the APS general meeting in Washington, DC, April 1997. Bunny C. Clark will become Chair, Stuart J. Freedman will become Chair-Elect, and Thomas J. Bowles, Cathleen E. Jones, and Berndt Mueller will remain members of the Executive Committee. A Vice-Chair, Secretary-Treasurer, and three members of the Executive Committee are to be elected before April 1997.

The enclosed nominating ballot must be signed and may be returned in the enclosed envelope with your name and address printed or signed legibly in the upper left hand corner of the envelope. It must be received by **Benjamin F. Gibson** on or before **30 June 1996** in order to be counted. The DNP bylaws require that a nominee proposed for a given post by not fewer than one-fiftieth of the members (50 for this election) shall be deemed nominated to that post.

If you are a DNP member, please exercise your right to nominate candidates for the upcoming DNP elections. In 1995 there were only 62 nomination forms received by the Secretary-Treasurer. More members vote in the DNP elections, but for 1996 only about 650 election ballots were mailed in by members. **It is important to vote!**

## 3. NOMINATIONS FOR THE 1997 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, R. Middleton and W. Haerberli, 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, and J. D. Walecka.

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 1996** to: Dr. Michael J. Musolf, INT,  
Physics & Astronomy Bldg., Box 351550,  
University of Washington, Seattle, WA 98195.

#### **4. FUTURE DNP FALL MEETINGS**

The present schedule for fall meetings is as follows:

1996 October 2-5 Cambridge, MA
1997 October 5-8 Whistler, B.C.
1998 October Santa Fe, NM
1999 October Asilomar, CA

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.

#### **5. FUTURE SPRING MEETING INFORMATION**

Look ahead to the 1997 APS spring meeting, which returns to Washington, DC, 19-22 April. This will be a Saturday through Tuesday meeting, a joint

endeavor involving both the Canadian and Mexican Physical Societies.

The 1998 APS Spring meeting will move again to the midwest, Columbus, Ohio.

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 will produce a "wall chart" for the Centennial. Ideas for important events to include from this century will be solicited.

#### **6. DNP BUSINESS MEETING AT THE 1996 SPRING APS MEETING, INDIANAPOLIS, IN, 2-5 MAY 1996**

The Business Meeting of the DNP was held at 17:30, Saturday, 4 May in the Ballroom of the Convention Center following Session L1. The meeting opened with congratulations to the Bonner Prize recipient, Prof. J. D. Walecka, and to the Dissertation Award winner, Greg Schmid, and to those elected to APS Fellowship in the DNP, viz. Cyrus Baktash, Martin D. Cooper, Thomas M. Cormier, Cary N. Davids, John Jacob Domingo, Geoffrey L. Greene, Blayne Heckel, Kirby Wayne Kemper, James Paul Miller, Paul Anthony Quin, Wolf-Udo Schroder, Paul Stoler, Stephen A. Wender.

The outgoing DNP Chair, Dirk Walecka, thanked the other officers and committee members with whom he had worked during his tenure. He turned the gavel over to Lee Riedinger, incoming DNP Chair.

The Secretary-Treasurer, Ben Gibson, reported on the remarkably solvent financial status of the DNP treasury and the DNP prize funds. He reported that the Bonner-Prize fund

stood at \$123,459 as of 31 December 1995. The new Bethe Prize, see item 10 of this newsletter, stands at \$110,000. A list of donors is attached to this newsletter. The Dissertation Award fund stood at \$37,383.

The incoming DNP Program Chair, Bunny C. Clark, reported on the plans for the 1996 Fall meeting at Cambridge, MA. See item 8 of this newsletter for more details.

Other items on the agenda included a report on the DOE and NSF budget processes. See item 11 for summary of the budget situation. Dirk Walecka gave a report on NSAC activities (see item 13). Lee Riedinger closed the meeting with a summary of the new Ad Hoc Funding Committee (see item 12).

## **7. DIVISIONAL COLLOQUIA FOR THE APS/AAPT SPRING MEETING AT INDIANAPOLIS, IN, 2-5 MAY 1996**

*Divisional Colloquia on Nuclear and Particle Astrophysics* were sponsored by The Division of Astrophysics, The Division of Nuclear Physics, and The Division of Particles and Fields of the APS.

These special colloquia on topics in nuclear and particle astrophysics were held on Thursday evening, May 2, 1996, during the Indianapolis Spring Meeting. They were intended to provide an introduction to three important issues in nuclear and particle astrophysics: big bang nucleosynthesis and the dark matter problem, the solar neutrino puzzle, and the microwave background as a probe of cosmological models. The lectures were presented in the style and at the level of typical department colloquia, intended for a general audience, including younger researchers and those who are not experts in this research area. The colloquia were free to those registered for the Spring APS/AAPT Meeting.

David Schramm, University of Chicago  
*"Shadows of Creation: The Dark Matter of the Universe"*

This talk explored the key problems in physical cosmology today, namely the nature of the dark matter and its relation to the age of the universe and the origin of cosmic structure. The new results tightening up the need for exotic, non-baryonic, dark matter were discussed, including the new extra galactic Keck Telescope deuterium measurements and the MACHO microlensing results. The next generation microwave background experiments was discussed along with the current status of the age arguments.

Hamish Robertson, University of Washington  
*"The Problem of the Missing Solar Neutrinos"*

Recent results from Kamiokande, SAGE, and GALLEX, when combined with the Homestake measurements, indicate a pattern of solar neutrino fluxes that is inconsistent with the predictions of reasonable solar models. This situation and plausible particle physics solutions were reviewed. Two new detectors that will hopefully resolve this puzzle, SNO and SuperKamiokande, are now nearing completion. A summary was given of the important physics expected from these experiments.

Paul Steinhardt, University of Pennsylvania  
*"Imaging the Early Universe"*

This colloquium explored how measurements of cosmic background radiation over the next decade will provide a snapshot of the early Universe. The results will allow us to test the cosmological models that have been advanced to explain the origin and evolution of galaxies and large-scale structure.

## **8. DNP FALL MEETING AT CAMBRIDGE, MA, 2-5 OCTOBER 1996**

### *General Information*

The Annual Fall Meeting of the Division of Nuclear Physics, including two workshops, will be held October 2-5, 1996 on the campus of the Massachusetts Institute of Technology in Cambridge, Massachusetts.

The Boston/Cambridge area has something for everyone with its history, cultural events, sports, nightlife, and fine ethnic restaurants. Early October is generally the height of the fall foliage season and daytime temperatures are typically between 50° and 70°F.

### ***Meeting Program***

The meeting will consist of five sessions of invited talks, a plenary session, and approximately 25 sessions of contributed papers. The 1996 Program Committee arranged two sessions of invited papers on topics selected at the recent Indianapolis APS/AAPT meeting. Two "voted" sessions based on nominations from the DNP membership will be arranged by the Program Committee Chair. The Local Committee is organizing a fifth session of invited talks on "Axial Currents in Nuclear Systems".

There will also be two workshops, a business meeting of the Division, meetings of user groups of various accelerator laboratories, a banquet/cruise on Friday, October 4, and tours of the Bates Linear Accelerator Center.

### ***Workshops***

Two workshops will be held on October 2, prior to, but in conjunction with, the DNP meeting. One workshop will be on "The Quark/Gluon Structure of the Nucleon," organized by John Negele and Richard Milner, and the second workshop will be on "Collective Effects and the Quark-Gluon Plasma in Heavy Ion Collisions," organized by Craig Ogilvie and Stephen Steadman. The workshops will run in parallel. A \$30 registration fee covers both workshops. Registration will take place on October 2, 1996.

### ***Registration***

Registration will begin on October 2, 1996 at 7:30 a.m. - 9:00 a.m. in the Mezzanine Lounge, Stratton Student Center, MIT Campus, W20-500, across the street from 77 Mass. Ave,

the front entrance of MIT. Registration will continue from 5:30 p.m. to 7:00 p.m. at the Cambridge Center Marriott, 2 Cambridge Center, Cambridge, MA. The pre-registration fees are \$115 for APS members, \$230 for non-APS members and \$10 for retired and unemployed members as well as for students. The fee to join the DNP is \$121 or, if you would like to join the APS/DNP, the cost is \$224 (both prices include the meeting registration fee).

### ***Accommodations***

The host hotel is the Cambridge Center Marriott, located next to the MIT campus. Rooms at a number of other hotels will be available as well. Roommate matching will be provided for those who wish it.

Cambridge Center Marriott (#1 on the map)  
2 Cambridge Center  
Cambridge, MA 02142  
Tel: (617) 494-6600

A luxury hotel located in the heart of the Cambridge business community overlooking the Charles River and adjacent to MIT. Includes an indoor pool, whirlpool, saunas and health club. The opening reception and a number of the meetings will be held at the Marriott.

Royal Sonesta Hotel (#2 on the map)  
5 Cambridge Parkway  
Cambridge, MA 02142  
Tel: (617) 491-3600, 1-800-SONESTA  
Fax: (617) 661-5956

A luxury hotel located on the banks of the Charles River. Walking distance (15-20 minutes) to MIT or take the CambridgeSide Galleria shuttle.

Holiday Inn - Somerville (#3 on the map)  
30 Washington Street  
Somerville, MA 02144  
Tel: (617) 628-1000  
Fax: (617) 628-0143

Relatively inexpensive hotel, close to public transportation. The hotel will provide a shuttle service.

Howard Johnson Hotel (#4 on the map)  
777 Memorial Drive  
Cambridge, MA 02139  
Tel: (617) 492-7777, 1-800-654-2000  
Fax: (617) 492-6038

This hotel is approximately a 30 minute walk to MIT. Free parking is available to hotel guests.

The Shawmut Inn (#5 on the map)  
280 Friend Street  
Boston, MA 02114  
Tel: 1-800-350-7784  
(617) 720-5544

Relatively inexpensive, adjacent to public transportation.

Holiday Inn - Brookline (#6 on the map)  
1200 Beacon Street  
Brookline, MA 02146  
Tel: (617) 277-1200  
Near public transportation.

Further information on hotels will be provided to all preregistered attendees.

### ***Tour of Bates Linear Accelerator Center***

A tour of the Bates Linear Accelerator Center will be held on Thursday, October 3, 1996. Bus service will be provided from MIT to Bates and back.

### ***Dinner Cruise***

In place of a more formal banquet, a dinner cruise of Boston Harbor is planned for Friday, October 4, 1996.

### ***User Group Meetings***

It is anticipated that many groups will wish to hold user group meetings during the fall meeting at MIT. To schedule them so as to prevent conflicts with other activities and to have them announced in the October Bulletin, it will be necessary to make arrangements with the Local Organizing Committee by June 21, 1996.

### ***Meeting Information***

For further information and/or Registration and Housing questions, please contact Ms. Heidi Demers, DNP Conference, MIT - Laboratory for Nuclear Science, Building 26-505, 77 Massachusetts Ave., Cambridge, MA 02139. Tel: (617) 258-5448, Fax: (617) 253-0111, email: [lnsdnp@mitlns.mit.edu](mailto:lnsdnp@mitlns.mit.edu) and web site: <http://www-lns.mit.edu/dnp.html>.

<p><b><i>Housing Deadline:</i></b> August 16, 1996 <b><i>Preregistration Deadline:</i></b> September 16, 1996</p>
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### ***Registration***

An advance registration form and a housing form are included with this Newsletter.

### ***Local Organizing Committee***

William Bertozzi, MIT, Edward Booth, Boston University, Heidi Demers, MIT, T. William Donnelly, MIT, Jean Flanagan, MIT, Jochen Heisenberg, University of New Hampshire, Stanley Kowalski, MIT, June Matthews, MIT, Richard Milner, MIT, Rory Miskimen, University of Massachusetts, John Negele, MIT, Craig Ogilvie, MIT, Robert Redwine, MIT (Chair), Stephen Steadman, MIT.

### ***Town Meeting***

There will be a "*town meeting*" on Friday afternoon. The intent of this session is to provide an opportunity for a large segment of the nuclear science community to be exposed to and to contribute to arguments regarding future challenges and priorities for the field.

### ***Abstracts for Contributed Papers***

The deadline for contributed abstracts is **28 June 1996**. See enclosed instructions. Note the special ID for the new Mini-Symposia.

For information on submitting your abstract electronically, send a message to "abs-info@aps.org" and include the word "info" in the text of your message or you can check the www site <http://aps.org>.

After reaching the APS home page, click on "Meetings Information" Under that heading will be found a section entitled "Electronic Submission of Contributed Abstracts". There is a "General Information" area and an "Instructions" area, as well as an area from which one can send email questions to the APS. Note: The meeting ID is DNP96.

Paper abstracts will be accepted, BUT only the title and authors will appear in the Bulletin. Unfortunately, abstracts sent C.O.D. cannot be accepted.

If more than one contributed paper is submitted with the same first author, please indicate which abstract should be assigned to the regular program; all except one will be assigned to the supplementary program. All instructions and requests regarding an abstract should appear at the bottom of the abstract itself.

There have been complaints that a number of contributed abstracts are not being presented and that no notification is being given. If you or a colleague are unable to present your paper, please inform the Secretary-Treasurer in advance.

### ***Fall Meeting Mini-Symposia***

At the 1996 DNP Fall Meeting in Cambridge, we will again offer DNP Mini-Symposia, as we did at the IND96 spring meeting. Mini-Symposia are focussed sessions in which an invited speaker sets the tone for the topic, provides the introduction, highlights new developments, etc. That talk is then followed by related contributed papers. Abstracts are submitted in the usual manner -- electronically to APS HQ as indicated in the companion instructions accompanying this Newsletter.

To insure that your abstract is considered for the Mini-Symposia in which you wish to participate, it is necessary that your abstract be identified with the appropriate code (L1, L2, L3, or L4) as indicated below. There is no guarantee that all abstracts submitted for a given Mini-Symposia can be accommodated in that contributed paper session. In the event that more abstracts are received than can be accommodated, the additional abstracts will be assigned to another related contributed paper session.

### ***ID            Session Title Organizers***

L1	"Nuclear Temperature Thermometers"	B. Tsang M-E. Brandan R. Roy
L2	"Giant Resonances"	U. Garg
L3	"Halo Nuclei"	B. Tsang
L4	"Identical Bands"	J. Becker

Any questions about these topics should be directed to the session organizers, who are members of your DNP Program Committee. For your convenience, the following email addresses are provided:  
tsang@nscl.msu.edu,  
brandan@servidor.unam.mx,  
reneroy@vm1.ulaval.ca, garg@nd.edu,  
becker@lll-winken.llnl.gov

## **9. 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 Peggye 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.

It is particularly important for nominators to ensure that the cases which 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.

The 1996 and 1997 DNP Fellowship Committees are listed in item 1 of this Newsletter. The Fellowship Committee reviews the nominations for APS fellowship referred to the DNP and recommends a slate of candidates which is forwarded to the DNP Executive Committee and then to APS Council for approval.

## **10. APS BETHE PRIZE, W. Haxton AND E. Henley**

The DNP has joined with the Division of Astrophysics in an effort to create a new APS prize in honor of Hans Bethe. The goal is to raise the necessary \$150,000+, the level required to keep the prize self-sustaining, prior to Bethe's 90th birthday, July 2, 1996. Contributions from laboratories, industry, and over 300 individuals now total about \$135,000. (A list of DNP donors is included in this newsletter.) Last call to donate prior to Bethe's birthday.

The Bethe Prize effort was inspired by an address given by Bethe at a recent Washington APS meeting in which he described himself as a nuclear physicist and an astrophysicist. The prize is intended to reflect the breadth of Bethe's interests, and will be awarded for outstanding work in either of these fields. The Divisions will work together in selecting the recipients, with the role of "lead Division" alternating. We ask each member of the two Divisions to consider supporting this effort.

You will find enclosed in this newsletter a donation form that can be mailed to the DNP Secretary/Treasurer Ben Gibson. The broader the support for this effort, the more meaning the prize will have for Bethe and for our community. Thank you for your help.

## **11. BUDGET UPDATE FROM THE NUCLEAR SCIENCE RESOURCES COMMITTEE, L. RIEDINGER**

In late April, the FY1996 appropriations process finally was finished, halfway through the federal fiscal year. House Resolution 3019 was passed and signed, and this completes the funding of a number of agencies that had been existing on continuing stop-gap funding bills at reduced levels. One such agency was the National Science Foundation, which was finally approved with a budget of \$3220M, \$2314M of which is for Research and Related Activities. These numbers are close to FY95 levels (3263, 2280),

and up from those agreed to last fall in the conference committee of the House and Senate (3180, 2274) and from the amounts available in the continuing piecemeal funding bills that had been in effect.

On March 19 the Clinton administration sent to Congress its FY1997 budget request. This contains good increases for the NSF and for General Sciences in the Department of Energy. The NSF budget would be \$3325M, and of this \$2472M for Research and Related Activities. These represent increases of 3.3% and 8.7%, respectively, in the FY96 budgets recently enacted. This healthy increase for the overall research budget would be maintained for Mathematical and Physical Sciences, but any detail below that is not available at this early stage. In the DOE request, the Nuclear Physics budget would increase from \$304.5M in FY96 to 318.4. This is certainly a welcome relief after the substantial drop that occurred between FY95 and 96 (\$331.5M to 304.5).

It is difficult to predict how rocky the road will be in the Congress for these FY97 budgets. The pressure to reduce budget levels continues in full force, and the philosophical differences between the Congress and the Administration remain. The House Science committee has passed a bill that authorizes only \$3250M for the NSF, far below the request. But, it is felt by some that this authorizing committee will have less influence on the appropriations process this year compared to last (recall the attempt of the House authorizing committee to remove funding for a number of university-based nuclear physics labs supported by DOE). The House appropriations subcommittees hope to have some of their bills done by Memorial Day, at which time the Senate counterparts will begin work in detail.

A huge cloud on the horizon is the "out-year projections". Both the Administration and the Congress have drafted broad seven-year scenarios that would bring a balanced federal budget in 2002. The Administration has published these projections attached to the FY97

request, and these numbers are frightening for basic research in DOE. In this projection, the budget for General Science (high energy and nuclear physics) is programmed to drop by almost 25% by 2000 before returning to the current level in 2002. Such a scenario would make it impossible to carry out the new Long Range Plan for nuclear physics, as the budget planning for that assumed an FY97 budget in the range of \$325M to 350M, with cost of living increases after that. And, DOE plans to contribute funds (\$400M or more) to the Large Hadron Collider at CERN seem impossible with that austere outlook. But, there seems to be a common perception that these DOE projections will be revisited in preparation for the FY98 budget submission. Let us hope so!

An excellent Physics Today article (May issue, page 55) gives much detail on the FY97 budget request.

## **12. AD HOC COMMITTEE ON NUCLEAR PHYSICS FUNDING, L. Riedinger**

The Executive committee of the Division of Nuclear Physics, led by Chair Dirk Walecka, established in March an Ad Hoc Committee on nuclear physics funding. This committee is charged to:

1. Reiterate the crucial role of basic research, in particular basic research in nuclear physics, to the long-term economic, technical, and intellectual health of our country;
2. Write a concise statement detailing the specific impacts on the field of nuclear physics if the FY97 budget is not consistent with the long-range planning guidelines issued by the agencies;
3. Discuss the strategy for increasing the budget in subsequent fiscal years to achieve the adequate operation of our field;
4. Maintain liaisons with appropriate leaders of the Department of Energy, the National Science Foundation, and the Nuclear Sciences Advisory Committee;
5. Make visits to Capitol Hill to transmit the need for adequate funding for nuclear physics.

6. Encourage the nuclear physics community to communicate the scientific excitement of the field and the need for adequate funding to their individual members of Congress.

The appointed membership of this committee is:

John Cameron, Director, Indiana University Cyclotron Facility

Bunny Clark, Ohio State University

Hermann Grunder, Director, CEBAF

Ernest Henley, University of Washington

Walter Henning, Director, Physics Division,

ANL

Lee Riedinger, University of Tennessee, Committee Chair

Nick Samios, Director, Brookhaven National Laboratory.

In addition, other representatives of major laboratories will be asked to contribute their views and help on these important issues.

Representatives of this committee visited Capitol Hill on April 23rd to talk with staff members of the House and Senate Energy and Water Appropriations Subcommittees and to give support to the administration's FY97 budget request. In addition, plans are being made to ask DNP members in states and districts of the legislators on the crucial Appropriations Subcommittees to contact their elected officials over the Memorial Day recess, also to give support for the DOE and NSF budget requests. The offices of the American Physical Society and the Southeastern Universities Research Association are assisting the committee in its work, and that is greatly appreciated.

### **13. NSAC REPORT, H. Robertson**

The NSAC meeting on May 1 began with presentation of the Long Range Plan, which has been printed. There are also printed copies of the "Highlights" excerpts, and both are available on the Web at <http://www.er.doe.gov/production/henp/nsac/lrp.html>. There was discussion of the International Collaboration in Nuclear Physics, a committee

being formed under the auspices of IUPAP to provide a forum for international cooperation, especially with respect to large facilities. Another topic was NSAC's response to the report of the Composite Panel for the Assessment of the Status of Accelerator Physics and Technology. NSAC endorsed the report, emphasizing both the importance of Accelerator R&D and the need to maintain a peer-reviewed program in consonance with the Long Range Plan. The retirement of Bill Hess, Associate Director for High Energy and Nuclear Physics in DOE, has led to the formation of a search committee for this important position, and candidates are being sought. David Hendrie and Jack Lightbody presented the status of funding within DOE and NSF respectively. NSAC discussed the reports, in particular the priority of funding for equipment as expressed in the Long Range Plan, and the Michigan State University upgrade. With RHIC construction nearing completion, NSAC was charged with reviewing projected operating expenses for RHIC and its associated detectors. Completion of the review by mid-August was requested. The subpanel will be chaired by Rich Orr (former Director of Accelerator Operations at Fermilab) and co-chaired by Bob Redwine.

### **14. DNP AD HOC COMMITTEE ON EDUCATION, P. Cottle (CHAIR) AND N. Koller**

The DNP ad hoc Committee on Education was formed to enhance the public awareness of nuclear physics and nuclear science issues. The committee will engage in activities aimed at the general public as well as at students at the middle school, high school and university levels. In selecting its projects, the committee is focusing on activities which will benefit from a national perspective. The committee will be enlarged as new opportunities for outreach are identified and new members who wish to pursue these opportunities are added.

Committee members are actively engaged in projects. Paul Rutt is working on the design of a traveling exhibit on nuclear physics for science museums. Craig Stone is looking into making

real-time nuclear science experiments available to middle and high school students via the Internet. Jim Carr is starting to assemble a World Wide Web resource for middle and high school students who wish to investigate the field of nuclear science for term papers and other projects. In addition, the possibility of producing a show on nuclear astrophysics for a TV series on science (such as the PBS series Nova) is being discussed with the Division of Astrophysics.

#### **15. WWW HOME PAGE FOR DNP, B. Balantekin**

A worldwide web home page for the Division of Nuclear Physics is available at "<http://nuclth.physics.wisc.edu/dnp/>". Check it out. We would like to hear your comments and suggestions. Please send them to "[dnp@nuclth.physics.wisc.edu](mailto:dnp@nuclth.physics.wisc.edu)".

#### **16. PHYSICAL REVIEW C ONLINE**

Physical review C will be available online this summer. Subscription information will be sent -- via postal service and email -- to all PRC subscribers in the near future. Additional information will be available shortly in the "New Services Available" section on the APS publishing home page (<http://publish.aps.org/>).

Comments regarding improvements in the product, which will initially aim to provide a service equivalent to that enjoyed by individual subscribers to PRC, are welcomed by the Editor.

#### **17. APS E-PRINT SERVER, A. Smith (RIDGE)**

The American Physical Society is developing a World-Wide Web-based system for members and other physicists to post preprints, and to browse those which have been made publicly available. The service is similar to the 'e-print' archives run by Paul Ginsparg at Los

Alamos since late 1991, though with a few minor technical differences that are hoped to bring about the participation of a larger fraction of the physics community. The APS E-print service will also help in the exploration of new internet-based technology for submitting, refereeing, editing and publishing papers in the Physical Review journals. A prototype version of the service will be available from July 1, 1996, listed under the 'New Services Available' section of the web page <http://publish.aps.org/> and members are invited to try it and send comments to the administrators of the service at the email address [eprint-adm@aps.org](mailto:eprint-adm@aps.org).

#### **18. PHYSICAL REVIEW SUBSCRIPTION COSTS**

Between 1985 and 1994, the CPI index rose from 1.05 to 1.48, while the index for Periodicals rose from 1.1 to 1.57. The Publication Oversight Committee (POC) has examined the finances of The Physical Review and found that Library subscription rates have been increasing at a substantially higher rate due to: 1) inflation (5% from the above indices), 2) decrease in the number of library subscriptions (3%) due to increased prices, 3) loss of page charge income (2%), 4) growth in number of pages published (3%), and 5) costs (2%) of handling increased submissions (6%) due to reduction of page charges. (Note that individual subscriptions have no effect, because they are provided at cost to subscribers - paper, printing, binding, mailing.)

The POC has recommended, and the APS Council has approved, a policy designed to hold Library subscription costs to no more than an increase of 10% per year. To attain that goal, the growth in published pages must be held to zero (0) growth. Costs due to handling increased submissions will continue to mount (2%). Loss of page charge income will continue (2%). The decrease in Library subscriptions has been a 3% long term phenomena. The inflation component is assumed to be only 3%. To achieve zero

growth in published pages in the face of increased submissions, referees will be asked to raise standards for acceptance. The Merzbacher report suggested that 10-20% of published papers were marginal and would not be missed.

Let your DNP Executive Committee hear from you regarding the POC/APS Council action.

## 19. 1997 SUMMER SCHOOL IN NUCLEAR PHYSICS

The Steering Committee of the annual Summer School in Nuclear Physics is presently soliciting proposals for 1997. Selection will be made this summer. If you are interested in serving as the Organizer for 1997, please contact the chair, Jorgen Randrup at LBL (randrup@lbl.gov), or the vice-chair, Bruce Barrett at the Univ. of Arizona (bbarrett@ccit.arizona.edu) prior to August 15, 1996.

Site possibilities in 1997 include, but are not limited to, the University of Washington campus and the Pack Forest preserve. The Institute of Nuclear Theory, Univ. of Washington, Seattle, will provide administrative support and the School's NSF grant covers student expenses regardless of the School's location. If sites are proposed elsewhere in the U.S., the Steering Committee will ask the host institution to partially support the School by covering the travel and living expenses of the lecturers. The annual Summer School in Nuclear Physics is a nuclear physics community activity from which the rotating membership of the Steering Committee is drawn.

## 20. 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, DNP, MS B283, Los Alamos National Laboratory, P.O. Box 1663, Los Alamos, NM 87545

**1995-96 Prices:** The dual prices (separated by a slash) listed below correspond to USA/other countries including Canada. Volumes 12-41 are \$55/\$60 retail and \$39/\$42 for DNP members. Volumes 42 and 43 are \$59/\$64 retail and \$42/\$45 for DNP members. Volume 44 is \$62/\$67 retail and \$44/\$47 for DNP members.

Other Annual Reviews are also available. 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.*

## 21. FUTURE CONFERENCES

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

**"Fourth International Conference on Radioactive Nuclear Beams"**, 3-7 June 1996, Omiya, Japan.  
Hosted by the Institute of Physical and Chemical Research (RIKEN) and the Institute for Nuclear Study (INS).  
Contact: RNB-4 Conference Secretary, phone: 81-484-62-1111 ext 4211, fax: 81-484-62-4689, email: rnb4@rikvax.riken.go.jp, www: <http://www.riken.go.jp>.

**"1996 Gordon Research Conference on Photonuclear Reactions"**, 28 July-2 August, 1996, Tilton, NH.  
Contact: Alan Nathan, 1110 W. Green Street, Urbana, IL 61801 USA, phone: 217-333-0965, fax: 217-333-1215, email: "a-nathan@uiuc.edu", www: <http://www.npl.uiuc.edu/gordon>.

**"1996 Gordon Research Conference on the Dynamics of Small Systems"**, 11-16 August 1996, Proctor Academy, Andover, NH.

Contact: Stephen Berry, email:  
berry@rainbow.uchicago.edu; application forms:  
grc@grcmail.grc.uri.edu.

**"Gull Lake Conference on Nuclear  
Physics Near The Drip Lines"**, 21-24 August  
1996, Gull Lake, MI.

Organizer: Michael Thoennessen. Contact:  
Shari Conroy, NSCL, MSU, East Lansing, MI,  
48824, phone: (517) 333-6333, fax: (517) 353-  
5967, email: conroy@nscl.msu.edu, www:  
<http://www.nscl.msu.edu/nscl/conferences/gull\96.html>.

**"Ninth International Symposium on  
Reactor Dosimetry"**, 2-6 September 1996,  
Prague, Czech Republic

Hosted jointly by the American Society for  
Testing and Materials and the European  
Working Group on Reactor Dosimetry.  
Contact: D. W. Vehar, Sandia National  
Laboratories, MS 1142, Org. 9362, P.O. Box  
5800, Albuquerque, NM 87185-1142, phone:  
(505) 845-3414, fax: (505) 844-0798, email:  
dwvehar@sandia.gov.

**"9th International Symposium on  
Capture Gamma-Ray Spectroscopy and  
Related Topics"**, 8-12 October 1996, to be  
held in Budapest, Hungary.

Contact: G. Molnar, Nuclear Physics  
Department, Institute of Isotopes, POB77, H-  
1525 Budapest, Hungary, phone: 36-1-275-  
4347, fax: 36-1-275-4349, email:  
"molnar@iserv.iki.kfki.hu".

**"LAMPF Users Group Inc. Symposium -  
20 Years of Meson Factory Physics:  
Accomplishments and Prospects"**, 25-26

October 1996, Los Alamos, NM  
Contact: Susan Ramsay, LANL, MS H844, Los  
Alamos, NM 87545, phone: 505-665-1819, fax:  
505-665-6943, email: lugi@lanl.gov.

**"INS Symposium on Nuclear and  
Particle Physics with High-Intensity Proton  
Accelerators"**, 3-6 December 1996,

INS, Tokyo, Japan.

Contact: T. Fukuda, email:  
fukuda@insei1.decnet@kek.vax.kek.jp.

**"Sixth Conference on the Intersections of  
Particle & Nuclear Physics"**, 27 May - 2 June,  
1997, Big Sky, Montana

Contact: Conference Secretary CIPANP, LANL,  
MS H844, Los Alamos, NM 87545, phone:  
(505) 665-1819, fax: (505) 665-6943, email:  
"cipanp@lanl.gov".

**"Sixth International Conference on  
Nucleus-Nucleus Collisions"**, 2-6 June 1997,  
Park Vista Hotel, Gatlinburg, TN.

Co-hosted by the Physics Division, ORNL and  
the National Superconducting Cyclotron  
Laboratory, MSU.

Contact: Ms. Ann M. McCoy, Conference  
Secretary, Mail Stop 6368, Oak Ridge National  
Laboratory, Oak Ridge, TN 37831-6368,  
email: nn97@mail.phy.ornl.gov.