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**TO: Members of the Division of Nuclear Physics, APS**  
**FROM: Virginia R. Brown, LLNL - Secretary-Treasurer, DNP**

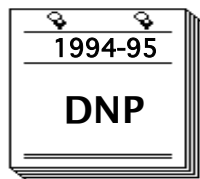
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**ACCOMPANYING THIS NEWSLETTER :**

- A ballot for the nomination of DNP Officers and Executive Committee.

**26-29 OCTOBER DNP MEETING,  
WILLIAMSBURG, VA**

- A pre-registration form which includes workshops and banquet.
- A housing form.
- A poster.



**Future Deadlines**

- **17 June 1994** - Contributed Abstracts for the Williamsburg Fall Meeting (see item 7).
- **24 June 1994** - User Group Deadline in order to appear in the October Bulletin (see item 7).
- **8 July 1994** - Nomination Ballot for DNP Elections (see item 2).
- **2 Sept. 1994** - Nominations for 1995 Bonner Prize (see item 4).
- **16 Sept. 1994** - Last day for Williamsburg "Special" Preregistration rates and last day for

lodging reservations at the Williamsburg conference.

**1. DNP COMMITTEES**

Executive Committee

- Carl B. Dover, BNL, **Chair** (1995)  
J. Dirk Walecka, W&M and CEBAF, **Chair-Elect, Acting Chair**, (1995)  
Lee L. Riedinger, Univ. of Tennessee, **Vice-Chair** (1995)  
Noemie Benczer-Koller, Rutgers Univ., **Past-Chair** (1995)  
Virginia R. Brown, LLNL, **Secretary-Treasurer** (1995)  
Stephen E. Koonin, Caltech, **Division Councillor** (December, 1995)  
Peter Paul, SUNY at Stony Brook, **Division Councillor** (December, 1997)  
A. Baha Balantekin, Univ. of Wisconsin at Madison (1996)  
Elizabeth J. Beise, Univ. of Maryland at College Park (1996)  
Susan J. Seestrom, LANL (1995)  
Brian D. Serot, Indiana Univ. (1995)  
Stephen J. Wallace, Univ. of Maryland (1995)  
Glenn R. Young, ORNL (1996)

### Program Committee

J. Dirk Walecka, W&M and CEBAF  
**(Chair)**  
Carl B. Dover, BNL **(Past-Chair)**  
Noemie Benczer-Koller, Rutgers Univ.  
**(Past-Chair)**  
Virginia R. Brown, LLNL **(Secretary-Treasurer)**  
Frank T. Avignone, Univ. of South Carolina  
Bruce R. Barrett, Univ. of Arizona  
Fred E. Bertrand, ORNL  
Billy E. Bonner, Rice Univ.  
John D. Cameron, Indiana Univ.  
Paul D. Cottle, Florida State Univ.  
John Dubach, Univ. of Massachusetts  
Stuart Freedman, UCB and LBL  
Joseph Kapusta, Univ. of Minnesota  
Kevin Lesko, LBL  
James S. McCarthy, Univ. of Virginia  
Richard Milner, MIT  
Lee Riedinger, Univ. of Tennessee  
Bradley M. Sherrill, Michigan State Univ.  
Edward Shuryak, SUNY at Stony Brook  
Stephen G. Steadman, MIT  
Roy Whitney, CEBAF

### 1995 Bonner Prize Committee

F. P. Calaprice, Princeton **(Chair)**  
D. F. Geesaman, ANL **(Vice-Chair)**  
H. G. Blosser, Michigan State Univ.  
F. Iachello, Yale

### 1996 Bonner Prize Committee

D. F. Geesaman, ANL **(Chair)**  
M. Musolf, CEBAF **(Vice-Chair)**  
J. B. Ball, ORNL  
R. E. Tribble, Texas A&M  
E. K. Warburton, BNL

### 1996 Dissertation Award Committee

J. D. Walecka, W&M and CEBAF  
**(Chair)**  
C. B. Dover, BNL **(Vice-Chair)**  
E. V. Hungerford, Univ. of Houston  
J. Kolata, Univ. of Notre Dame  
J. Rapaport, Ohio Univ.

### 1994 Fellowship Committee

W. C. Haxton, Univ. Wash. **(Chair)**  
J. Matthews, MIT  
V. E. Viola, Jr., Indiana Univ.

### 1995 Fellowship Committee

N. Benczer-Koller, Rutgers Univ.  
**(Chair)**  
J. Matthews, MIT  
S. J. Freedman, UCB and LBL  
J. Ginocchio, LANL

### Nominating Committee

J. Cameron, Indiana Univ. **(Chair)**  
J. Cizewski, Rutgers Univ.  
P. Paul, SUNY at Stony Brook  
J. Vary, Iowa State Univ.

### Nuclear Science Resources Committee

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

### Physics News Committee

J. D. Walecka, W&M and CEBAF  
**(Chair)**  
J. Dubach, Univ. of Massachusetts  
S. J. Freedman, UCB and LBL  
J. Kapusta, Univ. of Minnesota  
K. Lesko, LBL

R. Milner, MIT

*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 1995

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, D.C., 18-21 April 1995. J. Dirk Walecka will become Chair, Lee L. Riedinger will become Chair-Elect and A. Baha Balantekin, Elizabeth J. Beise, and Glenn R. Young 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 1995.

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 *Virginia R. Brown* on or before **8 July 1994** 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 (54 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 1993 there were only 74 nomination forms received by the Secretary-Treasurer. More members vote in the DNP elections, but for 1993 only about 788 election ballots were

mailed in by members. **It is important to vote!**

## 3. 1996 DISSERTATION AWARD IN NUCLEAR PHYSICS

This biennial 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, and Zhiping Zhao.

**Nature:** The Award consists of \$1,000 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 the deadline.

Send before **1 September 1995** the name of the proposed candidate, a summary of up to four pages of the thesis research, and a statement of his/her contribution to it as well as that of others. 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. This information is required and should be sent to Dr. J. Dirk Walecka, CEBAF, 12000 Jefferson Avenue, Room C210, Newport News, VA 23606.

## 4. NOMINATIONS FOR 1995 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. 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, and E. K. Warburton.

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 September 1994** to: Prof. F. P. Calaprice, Department of Physics, Jadwin Hall, Princeton University, P. O. Box 708, Princeton, NJ 08544.

## 5. FUTURE DNP FALL MEETINGS

The present schedule for fall meetings is as follows:

1994	October 26-29 Williamsburg, VA
1995	October 25-28 Bloomington, IN
1996	October 2-5 Cambridge, MA

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.

## 6. DNP BUSINESS MEETING AT THE 1994 SPRING APS MEETING, CRYSTAL CITY, VA

The Business Meeting of the DNP was held at 16:54, Tuesday, 19 April in the Regency Ballroom A&B of the Crystal City Hyatt Regency following Session G1. The meeting opened with congratulations to the Bonner Prize recipient, Ernest K. Warburton,

to the Dissertation Award Winner, Zhiping Zhao, and to those elected to APS Fellowship in the DNP, viz. James B. Ball, Janusz Dabrowski, Jay Clarence Davis, George Dennis Dracoulis, Donald F. Geesaman, Peter Herczeg, Roy J. Holt, Frieder Lenz, James S. McCarthy, Robert D. McKeown, David John Millener, Jen-Chieh Peng, Philip Grisier Roos, Brian David Serot, Isao Tanihata, and William Ernest Turchinetz.

The outgoing DNP Chair, Noemie Benczer-Koller, thanked other officers and committee members with whom she had worked during her tenure. The Secretary-Treasurer, Virginia R. Brown, reported on the financial status of the DNP treasury and the DNP prize funds. She reported that the **Bonner-Prize fund-raising drive spear-headed by Koller had been successful and with the additional promised donations the prize would achieve its self sustaining goal level.** Brown thanked N. Benczer-Koller for her fund-raising efforts and all her important contributions during her tenure as DNP Chair.

The incoming DNP Program Chair, J. Dirk Walecka, reported on the plans for the 1994 Fall meeting at Williamsburg, VA. See item 7 of this newsletter for more details.

Other items on the agenda included a report on the DOE and NSF budget processes from Dave Hendrie (DOE) and Jack Lightbody (NSF). See item 10 for summary of the budget situation. Ernie Moniz, NSAC Chair, gave a report on NSAC activities (see item 11). Gary Crawley gave a report on the progress of the DNP Brochure (see item 12).

## 7. DNP FALL MEETING AT WILLIAMSBURG, VA, 26-29 OCTOBER 1994

The Annual Fall Meeting of the Division of Nuclear Physics, including

workshops, will be held 26-29 October 1994 at the Fort Magruder Inn & Conference Center in Williamsburg, Virginia. Historic Colonial Williamsburg is located a short walk from the Conference Center. The Williamsburg area includes numerous additional popular attractions such as colonial plantations, Jamestown and Yorktown Colonial National Historical Parks, Busch Gardens and a variety of museums. Shopping ranges from the quaint shops to the 'famous' Williamsburg Pottery Factory. The Continuous Electron Beam Accelerator Facility (CEBAF) is 15 minutes travel from the meeting location.

### *Meeting Program*

The meeting will consist of six sessions of invited papers, one of which is the plenary session, and approximately 25 sessions of contributed papers. One invited session on "*Strangeness in Nucleons and Nuclei*" has been organized by the Local Committee. Two other invited sessions will be on topics selected by the program committee at the recent Crystal City APS meeting. One session on "*Spin Physics with Polarized Gas Targets Internal to Storage Rings*" is being arranged by R. Milner (MIT). Another session on "*Primordial Nucleosynthesis and the Baryonic Content of the Universe*" is being arranged by K. Lesko (LBL) and S. Freedman (UCB). Two invited talks on "*Octupole Shapes*" suggested by P. Cottle and B. Barrett are being combined with three "voted" talks to make up a session with a nuclear structure theme. An additional four "voted" talks, which will be selected by the DNP Program Committee from nominations made by the DNP membership at large, will be arranged into the other "voted" session. Overhead projectors will be provided in each room; slide projectors will only be available for invited papers (if requested in advance).

There will also be two workshops, a "town meeting", users' group meetings, a banquet on Friday, 28 October, and reception tours of CEBAF on Wednesday and Thursday, 26 and 27 October.

### **Plenary Sessions**

In preparation for a future call for the next "Long Range Plan", we are planning a plenary session for the Williamsburg meeting that will open the meeting and focus on the theme "*nuclear physics opportunities for the future.*" Some of the topics under consideration include nuclear theory challenges, hadronic physics, electromagnetic physics, relativistic heavy ions, radioactive beams, nuclear astrophysics, weak interactions, acceleration of polarized protons at RHIC, etc. The plenary session subcommittee consists of J. D. Walecka (Chair), A. B. Balantekin and S. J. Wallace. If you have any suggestions of topics that may be of interest to the community at large, please contact J. Dirk Walecka as soon as possible ("[walecka@cebaf.gov](mailto:walecka@cebaf.gov)").

Also under consideration is a "town meeting" plenary session to be held 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.

### **Workshops**

Two workshops to be held on 26 October prior to, but in conjunction with, the DNP meeting are being planned by the Local Committee. One workshop will be on "*Spin Degrees of Freedom in Electromagnetic Nuclear Physics.*" The second workshop is on "*Data Acquisition and Reduction Issues in Nuclear Physics.*" The workshops will run in parallel. A \$25 registration fee covers both workshops.

Registration will begin on 25 October at 15:00 - 21:00 hours and continue at 8:00 hours on 26 October. Registration for the DNP Meeting can also be accomplished at that time. The two workshops being planned by the Local Committee are:

- **Spin Degrees of Freedom in Electromagnetic Nuclear Physics**
  - Electron and Photon Sources
  - Targets
  - Polarimeters
  - Polarization Observables in Electromagnetic Processes
  - Spin Structure of the Nucleon
  - Electromagnetic Spin Structure Response of Nuclei

This workshop will cover the technical aspects from the accelerator injectors through to the targets and detectors, and the physics aspects of the possible experimental measurements.

- **Data Acquisition and Reduction Issues in Nuclear Physics**
  - Data Acquisition Systems
  - Simulations
  - Databases
  - Parameter Sets/Calibrations
  - Farms/Parallel Processing
  - Code Development

This workshop will cover issues associated with data acquisition and reduction for CEBAF and RHIC experiments where data rates up to tens of megabytes per second and media storage rates up to terabytes per day are anticipated.

## ***Registration***

On-site registration for the meeting will begin on 25 October at 15:00 - 21:00 hours and continue at 8:00 hours on 26 October. The pre-registration fees are \$90 for DNP members, \$190 for non-DNP members, and \$10 for retired and unemployed members and students. The cost of the workshop is an additional fee of \$25. The cost of registration will increase after the preregistration date of **16 September 1994**. The Friday, 28 October banquet is \$25.

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

To provide sufficient time for printing abstracts in the Bulletin, the deadline for contributed abstracts is **17 June 1994**. Abstracts should conform to the format specified in the APS News and should be sent, in triplicate, to:

Dr. V. R. Brown  
Secretary-Treasurer of the Division of  
Nuclear Physics  
Lawrence Livermore National  
Laboratory  
Box 808, L-288  
Livermore, CA 94550

For express mail services such as Federal Express or Emery, use 7000 East Avenue in the address in place of Box 808. Please do NOT send abstracts to the APS Headquarters. Abstracts received by Dr. Brown after the deadline cannot be included in the program.

Unfortunately, we are unable to accept abstracts sent via electronic mail; in addition 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 an increasing 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.

## ***Accommodations***

Reservation for all of the hotels will be coordinated by the Fort Magruder Inn and Conference Center (804) 220-2250 or (800) 582-1010 (US). Three additional hotels (as indicated on the housing form) will be used for the meeting. All three of these hotels are within a few minutes walk of the Fort Magruder Inn and Conference Center.

## ***Travel***

Three airports serve the Williamsburg area. Newport News-Williamsburg airport is about 15 minutes from the Fort Magruder Inn and Conference Center by car. Both Norfolk and Richmond airports are approximately one hour travel time. All of these airports have rental cars, taxis and limousine services. Maps and all of the local phone numbers for these services will be sent to all preregistered attendees.

## ***Reception Tours of CEBAF***

On Wednesday and Thursday, 26 and 27 October there will be Reception Tours of CEBAF. The buses will depart at 4:30 p.m. from Williamsburg at the Fort Magruder Inn and Conference Center. Each Tour can accommodate 350 people. The Reception will be at CEBAF Center. The Tour will include the CEBAF Accelerator and Experimental Areas.

### *Companion's Program*

The Williamsburg area is very popular with tourists. Special tours of Colonial Williamsburg, trips to colonial mansions, shopping at the Williamsburg Pottery, and trips to Busch Gardens will be provided. Where entrance fees apply, discounted tickets for most of these activities will be available. Companion program information will be sent out to all preregistered attendees.

### *Local Committee*

Further details and the final program for the meeting and workshops will be given in the October Bulletin. Members of the Local Committee are Keith Baker (HU), Warren Buck (HU), Larry Cardman (CEBAF), Roger Carlini (CEBAF), Carl Carlson (W&M), Dave Doughty (CNU), Dave Heddle (CNU), Nathan Isgur (CEBAF), Andi Klein (ODU), Bernhard Mecking (CEBAF), Sirish Nanda (CEBAF), Charles Perdrisat (W&M), Vina Punjabi (NSU), Wally Van Orden (ODU), and Roy Whitney, Chair (CEBAF).

### *User Group Meetings at Williamsburg*

It is anticipated that many groups will wish to hold User Group meetings during the Fall meeting at Williamsburg. In order 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 Roy Whitney, of the Local Committee, by **24 June 1994**.

### *Meeting Information*

For more information please contact: CEBAF User Liaison Office, Mail Stop 12B, 12000 Jefferson Avenue, Newport News, VA 23606, Ph: (804) 249-7586/4861, Fax: (804) 249-7398, E-mail: [dnp94@cebaf.gov](mailto:dnp94@cebaf.gov).

## **8. 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 Peggys 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.

The 1994 DNP Fellowship Committee is comprised of W. C. Haxton (Chair), V. E. Viola and J. Matthews. 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.

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.

#### **9. "PHYSICS NEWS IN 94", J. DIRK WALECKA**

A DNP subcommittee for Physics News 1994 has been formed. The members are shown in item 1 of this newsletter. In the next few months, the committee will be preparing a summary of the most newsworthy developments in nuclear physics in the past year for publication in the March 1995 issue of APS News. Members of the DNP are encouraged to suggest topics for Physics News to J. Dirk Walecka ("[walecka@cebaf.gov](mailto:walecka@cebaf.gov)").

#### **10. BUDGET UPDATE FROM THE NUCLEAR SCIENCE RESOURCES COMMITTEE, L.L. RIEDINGER (CHAIR)**

The Clinton administration budget request for the coming fiscal year (FY95) is under consideration by the Congress at this time. An overview of the request shows a continuing decrease in the defense part of "discretionary" spending (\$292B, 281B, and 271B in FY93, 94, and 95) and an increase in non-defense programs (\$250B, 270B, and 271B). Part of this is for Basic Research, now up to \$14B (from 13.4 and 13.8 in the previous two years). The National Institutes of Health represent the biggest piece of this

basic research segment, \$6.3B and a 4.7% increase. The National Science Foundation is second in size, with \$2.0B and a healthy 9.4% requested increase; the Department of Energy has \$1.6B in basic research and a 1.7% decline. The April issue of Physics Today has an extensive summary of the budget request.

In the Department of Energy, the FY95 request for Fundamental Science is \$2.88B, down from 3.34B in the current year. Of course, the SSC is the big loser, dropping in funding from \$640M this year to 180M next. The second biggest casualty is Nuclear Physics, slated to drop from \$348.6M to 300.8M. For comparison, High Energy Physics would rise from \$617.5M to 621.9M, and Basic Energy Sciences drop from 790.4M to 741.3M. Within the proposed nuclear budget, Medium Energy would take a 14% \$15M hit, as LAMPF operations would go from \$23.6M to zero, while CEBAF operations would rise by \$6.5M (to 49.8M). There is a 6% \$4.2M drop in the Heavy Ion budget, due to the closure of Bevalac. Low Energy would drop by 2% (\$0.4M), due to a bigger decrease in the Nuclear Data program. Construction would drop from \$102M to 78M, due to a 15M decrease in CEBAF construction (project essentially complete) and a 8M drop for RHIC (stretchout). Of course, this budget is viewed widely as a disaster for our field, and the reasons for the selection of Nuclear Physics for a major hit are not clear. Just as CEBAF is about to operate, DOE proposes essentially to remove from the budget whatever operating savings there are from LAMPF and Bevalac. The estimate is that CEBAF operation for experiments in its maiden year would be very, very small. There are efforts underway to take this message of harm to the Congress as they consider the appropriations bills, much as a small group did last year (with the result that

\$31M was added by the Congress to a low DOE request for FY94).

The requested FY95 budget for the National Science Foundation is \$3.20B, up 6% over FY94. Of this, the budget for Research and Related Activities would rise by 8.3% to \$2349M. The budget for Mathematical and Physical Sciences would rise by 6.1% to \$658M, of this Physics is slated for a 6% increase to \$141.7 million, with the proposed breakdown:

	FY94	FY95	% Increase
Elementary Particles	43.4	46.6	7
Nuclear Sciences	40.7	43.1	6
Atomic, Molecular, Optical	19.5	20.6	6
Theory	19.4	20.1	4
Gravitational	10.8	11.3	5
Physics Total	133.7	141.7	6

Physics programs in NSF received smaller requested increases than others, since the emphasis is on research in "strategic" areas (high performance computing, global change, advanced materials, biotechnology, manufacturing, etc.). This represents a continuing problem for nuclear physics, as some members of Congress continue to stress directed as opposed to fundamental research.

The appropriations bills are now beginning to wind their way through the Congress, so it will be summer or fall before the final story is told. The House Appropriations Subcommittee on Energy and Water is expected to mark up their DOE appropriations bill before Memorial Day.

**11. NSAC REPORT, N. BENCZER-KOLLER AND E. MONIZ (NSAC CHAIR)**

An NSAC meeting was held on April 19, 1994. The main agenda consisted in a discussion of the report of the subcommittee working on the charge received from M. Krebs (DOE) and W. Harris (NSF) in February. The DOE requested guidance to help plan future Nuclear Physics Programs. The DOE would like to have the present program assessed against the scientific priorities contained within existing recommendations of the Long Range Plan and subsequent NSAC documents.

Most of the meeting was spent discussing the DOE budget for FY95 and the requirements for operating a healthy program in FY96. The impact on nuclear physics research arising from the ~\$50M reduction in the DOE FY95 proposed budget was evaluated. Means to have the FY95 budget reevaluated by Congress were considered. The importance of maintaining the support of the field at least at the FY94 level was stressed. The final report will be discussed at the NSAC meeting at O'Hare Airport on May 14, 1994.

***E. Moniz's report to the Drell Committee:***

Moniz had a conversation with the Drell panel charged with considering the future of high energy physics after the demise of the SSC. He delineated the intersections between Nuclear and Particle Physics and stressed our desire to cooperate in advancing fundamental research in the DOE and to discuss research projects of common interest to both communities. He suggested formal mechanisms for future interactions such as joint NSAC/HEPAP sub-committees every couple of years or as needed.

**12. DNP BROCHURE, G. CRAWLEY**

The DNP Executive Committee at its meeting in Crystal City in April, 1994 agreed to give the go ahead to complete the

brochure with the following changes. The brochure will be about 16 pages in length. It will have the "Frontiers of Nuclear Science" section at the beginning and will have a closer page balance between the basic science and the spin-offs/applications. The next draft will be reviewed by a small committee of volunteers and sent to the printer. We hope to have the finished document available by the end of July 1994.

### 13. CHART OF THE NUCLIDES-STRASBOURG 1992 (EDITED BY M.S. ANTONY, DOCTEUR ES SCIENCES)

A new periodic table of elements is now available. The table contains 109 elements, thus including Meitnerium (Z=109). The element whose atomic number is 106, has been indicated as Seaborgium with Sg as its symbol. In addition to the usual physical and chemical properties etymology, such as origin of the name, discoverer and date of discovery of each element is indicated. Example: Lithium, lithos: origin Greek means stone: discovered by Arfwerdson in 1817. The dimension of the table are 29.5 by 40 cm in 4 colors.

The price of a table is 2 US\$. A minimum of 5 tables are requested for an order. All the money from the sale of the tables will be given to the European Association of Research in Leucodystrophies and Multisclerosis, related to dystrophy of the myelene sheath of the central nervous system.

For your orders, please contact: M.S. Antony, Docteur es Sciences, Centre Nucleaire, BP 20, 67037 Strasborg Cedex 2, France, Fax: 33 88 106479, Bitnet: "antony@frcpn11.bitnet".

### 14. 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, Virginia R. Brown, Lawrence Livermore National Laboratory, P. O. Box 808, L-288, Livermore, CA 94550.

**1994 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 (Dec. 1993) 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.*

### 15. FUTURE PROGRAMS OF THE INSTITUTE FOR NUCLEAR THEORY

The 1995 schedule of programs for the Institute for Nuclear Theory was recently announced. Those interested in taking part are urged to apply to the organizers as soon as possible.

#### *1995 schedule of programs:*

INT-95-1: **Chiral Dynamics in Hadrons and Nuclei**

February 15 - May 31, 1995

**Organizers:** Mannque Rho  
[rho@amoco.saclay.cea.fr,

33-1-6908-7469], Gerald Brown  
[popenoe@nuclear.  
physics.sunysb.edu, 516-632- 7989], Barry  
Holstein [holstein@phast.umass.edu, 413-  
545-0972], Dong-Pil Min  
[dpmin@phy.snu.ac.kr, 82-3-8806606].

**INT-95-2: Physics Beyond the Standard  
Model at Low and  
Intermediate Energies, June 26 -  
September 1, 1995**

**Organizers:** Mike Musolf  
[musolf@cebaf.gov,  
804-249-7383], W. J. Marciano  
[marciano@bnlcli,  
516-282-3151]

**INT-95-3: Nuclear Structure Under  
Extreme Conditions**  
October 2 - December 15, 1995

**Organizers:** Jerry Draayer  
[phdryr@lsuvm.sncc.  
lsu.edu, 504-399-2261], George Bertsch  
[bertsch@phys.washington.edu, 206-543-  
2895],  
Witek Nazarewicz  
[witek@orph14.phy.ornl.gov,  
615-574-4772]

The organizers of the spring and  
summer programs will host a two-week  
summer school for graduate students and  
beginning postdoctoral researchers June 12-  
23, 1995. An announcement of the school,  
including instructions for applying, will be  
made in the fall.

*Remaining 1994 programs:*

**INT-94-2: Applications of Chaos in  
Many-Body Quantum  
Systems, June 13 - September 2,  
1994**

**Organizers:** Steven Tomsovic  
[tomsovic@max.u.  
washington.edu, 206-543- 8944], Eric  
Heller [heller@physics.harvard.edu, 617-  
495-4177], Hans Weidenmüller  
[haw@zoology.mpi-hd.mpg.de,  
49-6221- 516410]

**INT-94-3: Hot and Dense Nuclear Matter**  
September 12 - December 10,  
1994

**Organizers:** Jorgen Randrup  
[randrup@lbl.bitnet,  
510-486-6157], George Bertsch  
[bertsch@phys.washington.  
edu, 206-543-2895], Ulrich Mosel  
[mosel@piggy.physik.uni-giessen.de, 49-  
641-702- 2800].

INT-94-2 has been closed for some  
time because of the large number of early  
applications. Because of the high level of  
interest, the organizers have arranged a  
workshop, to be held June 20-24, 1994, that  
will be open to all. Please contact the  
organizers if you would like to take part.

A small number of places remain  
open in the 1994 fall program. This will be  
the first program to take place in the INT's  
permanent quarters within the new  
University of Washington physics building.

*1994 CEBAF/INT joint workshop:*

**Probing Nucleon Structure with Real  
and Virtual**

**Compton Scattering, September 24 -  
30, 1994**

**Local Organizers:** Matthias Burkardt  
[burkardt@hans.  
npl.washington.edu, 206-685-3971],  
Michael Frank  
[frank@ben.npl.washington.edu, 206-685-  
3348]

The CEBAF/INT workshop will be held at Crystal Mountain, near Seattle. Interested theorists and experimentalists are asked to contact the organizers.

**16. THE INTERNATIONAL NUCLEAR PHYSICS CONFERENCE, AUGUST 21-26, 1995, BEIJING, CHINA**

The next international conference in Nuclear Physics will be held in China in the summer of 1995. Concerns have been expressed in view of the continued violations of human rights in China as to what role we could play while attending the conference. The first circular states that the conference will be sponsored and supported by the International Union of Pure and Applied Physics (IUPAP). IUPAP sponsorship implies that the conference will guarantee free entry, exit and circulation to all participants without political conditions and that a statement to this effect is to be written in all meeting announcements. The Committee on the International Freedom of Scientists (CIFS) of the American Physical Society has long been concerned with monitoring the human rights situation of physicists and other scientists around the world. The APS Executive Board has granted permission to CIFS to forward informational packages to APS members to raise awareness of the problems encountered by scientists in the host country and to assist attendees during their participation at Conferences. Relevant documents are available from Jenifer Kirin, CIFS Staff [(301)209-3237, kirin@aps.org].

**17. FUTURE CONFERENCES**

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

**"5th International Conference on Nucleus-Nucleus Collisions"** to be held 30 May - 4 June, 1994, in Taormina, Italy. [For further information contact: Massimo di Toro, LNS - INFN, Via S. Sofia 44, I-95125 Catania, Italy, phone: +39-95-542282 or 542323, fax: +39-95-7141815, telex: 971432, e-mail: "ditorio@lns.infn.it"].

**"The Fifth Conference on the Intersections of Particle and Nuclear Physics"** to be held May 31 to June 6, 1994 at the Stouffer Vinoy Resort, St. Petersburg, FL. The Conference will focus on the common areas of interest of current Particle and Nuclear Physics including Theory and Experiment, Facilities and Technology, and will emphasize the Physics in the Energy Region of 1 to 200 GeV. [For further information contact Elly Driessen, Conf. Secretary, TRIUMF, 4004 Westbrook Mall, Vancouver, B.C., V6T 2A3, Canada, phone: (604) 222-1047, fax: (604) 222-1074, telex: (0)-4508503, bitnet: "driessen@triumfcl", internet: "driessen@reg.triumf.ca", decnet: "45397::driessen"].

**"7th Varenna Conference on Nuclear Reaction Mechanisms"** to be held 6-11 June 1994, in Varenna, Italy. [For further information contact: E. Gadiolo, Physics Department, via Celoria, 16, I-20133 Milano, Italy, phone: +39-2-2392 293/298, fax: +39-2-2392-487, telex: 334687 INFNMI I, e-mail: "gadioli@milano.infn.it"].

**"International Conference on Perspectives for the Interacting Boson Model on the Occasion of its 20th Anniversary"**, to be held 13-17 June 1994, in Padova, Italy. [For further information contact: J. Mooney, Physics Department, Brookhaven National Laboratory, Upton, NY 11973, fax: (516) 282-5568, e-mail: "mooney@bnldag"].

**"Nuclear Physics: Physics of High Energy Heavy Ion Collision"** to be held 17-22 June 1994, in Vuosaari (near Helsinki), Finland. [For further information contact: Dr. Josip Hendekovic, European Science Foundation, 1 quai Lezay-Marnesia, 67080 Strasbourg Cedex, France, phone: 33-88-76-71-35, fax: 33-88-36-69-87].

**"The Nuclear Chemistry Gordon Conference '95"** to be held 18-23 June 1994, at Colby-Sawyer College North, New London, NH.

**"1994 Gordon Research Conference on Nuclear Chemistry"** to be held June 19-24, 1994, at the Colby-Sawyer College, New London, New Hampshire. The focus of this conference will be on nuclear reaction studies. [For further information contact: G. J. Wozniak, M/S 88, Lawrence Berkeley Laboratory, Berkeley, CA 94720, e-mail: "wozniak@lbl.gov", phone: (510) 486-7852, fax: (510) 486-7983].

**"The Heart of the Matter (6th Rencontre de Blois, from Nuclear Interactions to Quark-Gluon Dynamics)"** to be held 20-25 June 1994, in Chateau de Blois (Loire Valley), France. [For further information contact: Jean Francois Mathiot, Division de Physique Theorique, Institut de Physique Nucleaire, F-91406 Orsay Cedex, France, phone: 33-1-69417475 or 33-1-69417349, fax: 33-1-69285897, e-mail: "mathiot@ipncls.in2p3.fr"].

**"10th International Conference on High Power Particle Beams"** to be held 20-24 June 1994, in San Diego, CA. [For further information contact: Amanda A. Ness, Beams 94 c/o Maxwell Laboratories, 9244 Balboa Avenue, San Diego, CA 92123, phone: (619) 576-7882 or 7884, fax: (619) 576-7659, e-mail: "beams94@scubed.com"].

**"Particle and Nuclear Astrophysics and Cosmology in the Next Millennium"**, to be held 29 June-14 July, 1994, in Snowmass, Colorado. The Division of Astrophysics, the Division of Nuclear Physics, and the Division of Particles and Fields of the American Physical Society will sponsor a two-week Summer Study covering topics in astrophysics and cosmology that are intimately related to particle and nuclear physics. [For further information contact: Cynthia M. Sazama, Fermilab, M.S. 122, P.O. Box 500, Batavia, IL 60510. E-mail: "sazama@fnalv.fnal.gov", telefax: 708-840-8589].

**"4th European Particle Accelerator Conference (EPAC '94)"** to be held 27 June - 1 July 1994, in London, U.K. [For further information contact: Dr. Michel Olivier, CEN Saclay (Chairman), Christine Petit-Jean-Genaz (Contact), CERN-AC, CH-1211 Geneva 23, Switzerland, phone: +41-22-7673275, fax: +41-22-7830221, telex: 41 90 00 CER CH, e-mail: "christin@cernvm.cern.ch" or "christine\_petit-jean@macmail.cern.ch"].

**"Conference on Physics from Large Gamma-ray Detector Arrays"** to be held 2-6 August 1994, at Clark Kerr Campus, Berkeley, California. [For further information contact: Marie-Agnes Deleplanque, Nuclear Science Division, 70A-3307, Lawrence Berkeley Laboratory, Berkeley, CA 94720, phone: (510) 486-5384, fax: (510) 486-6707].

**"Physics Computing '94 (6th Joint EPS/APS International Conference on Physics Computing (PC '94))"** to be held 22-26 August 1994, in Manno, TI, Switzerland. [For further information contact: R. Gruber, CSCS, via Cantonale, CH-6928 Manno, Switzerland].

**"International Conference on Physics with GeV Particle Beams"** to be held 22-25

August 1994, in Julich, Germany. [For further information contact: K. Kilian or J. Speth, Forschungszentrum Julich GmbH, Institut für Kernphysik, D-52425 Julich, Germany, phone: +49-2461-61-3833, fax: +49-2461-61-4666].

**"Tours Symposium on Nuclear Physics II"** to be held 31 August - 2 September 1994, in Tours, France. [For further information contact: H. Utsunomiya, Scientific Secretary, Department of Physics, Konan University, Okamoto 8-9-1, Higashinada, Kobe 658, Japan, phone: +81, (78)-431-4341, ext. 626, fax: +81, (78)-413-2672, e-mail: "f51493@jpnkudpc"].

**"Euroschool in Exotic Beam"** to be held 4-9 September 1994, in Leuven, Belgium. [For further information contact: M. Huyse, Instituut voor Kern- en Stralingsfysika, K. U. Leuven, B-3001 Leuven, Belgium, phone: +32-16-201015, fax: +32-16-291959, e-mail: "mark=huyse%ksf%fys@cc3.kuleuven.ac.be"].

**"CLUSTER 94: Clusters in Nuclear Structure and Dynamics"** to be held 6-9 September 1994, in Strasbourg, France. [For further information contact: F. Haas, Centre de Recherches Nucleaires, 67037 Strasbourg Cedex 2, France, phone: 33-88-106843, fax: 33-88-106202].

**"CORINNE II (International Workshop on Multi-Particle Correlations and Nuclear Reactions)"** to be held 12-16 September 1994, in Nantes, France. [For further information contact: Janick Le Hetet, Evelyne Gerbaud, Laboratoire de Physique Nucleaire, Faculte des Sciences et des Techniques, 2, rue de la Houssiniere, 44072 Nantes Cedex 03, France, phone: +33-40-374955 or 33-40-373066, fax: +33-40-373176, e-mail: "corinne@frcpn11.bitnet"].

**"LEAP '94 (Third Biennial Conference on Low-Energy Antiproton Physics)"** to be

held 12-17 September 1994, in Bled, Slovenia. [For further information contact: Majda Kelbelj, Jozef Stefan Institute, Jamova 39, SI-61111 Ljubljana, Slovenia, phone: +386-61-1259199 (ask for Darko Korbar or Vladimir Cindro), fax: +386-61-1257074, e-mail: "leap94@ijs.si"].

**"International Symposia on High Energy Spin Physics and Polarization Phenomena in Nuclear Physics"**, to be held 15-22 September 1994, in Bloomington, Indiana. The conferences will discuss the effects of spin and polarization in various areas of high energy and nuclear physics research, as well as the technical aspects of polarized beams and targets. [For further information contact: Ms. Janet Meadows, Conference Secretary, Indiana University Cyclotron Facility, 2401 Milo B. Sampson Lane, Bloomington, IN 47408, phone: (812) 855-9365, fax: (812) 855-66645, internet: "spin94@venus.iucf.indiana.edu", bitnet: "spin94@iucf"].

**"Thirteenth International Conference on the Application of Accelerators in Research and Industry"**, November 7-10, 1994, to be held at the University of North Texas, Denton, TX USA. [For further information contact: J. L. Duggan, Univ. of North Texas, Dept. of Physics, P.O. Box 5368, Denton, TX 76203, phone: (817) 565-3252 or 3250, fax: (817) 565-2227, e-mail: "fc66@untvax.bitnet"].

**"Quark Matter '95, The Eleventh International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions"**, to be held 9-13 January 1995, in Monterey, CA, USA. [For further information contact: Art Poskanzer, Building 50-D, Lawrence Berkeley Laboratory, Berkeley, CA 94720, phone: (510) 486-5618, fax: (510) 486-4818, internet: "QM95@LBL.gov"].

***"Sixth International Symposium on Meson-Nucleon Physics and the Structure of the Nucleon"*** to be held 10-14 July 1995, in Blaubeuren, Germany. [For further information contact: Gerhard J. Wagner (Chairman), Ralph Bilger (Contact), Physikalisches Institut, Universität Tuebingen, D-72076 Tuebingen, phone: +49-7071-296304/296297, fax: +49-7071-296296, e-mail: "[me\\_nu95@pit.physik.uni-tuebingen.de](mailto:me_nu95@pit.physik.uni-tuebingen.de)".].

***"International Nuclear Physics Conference (INPC '95)"*** to be held 21-26 August 1995, in Beijing, China. [For further information contact: Prof. Xu Jincheng (Secretary), China Institute of Atomic Energy, P. O. Box 275 (80), Beijing 102413, People's Republic of China, phone; 86-1-9357787, fax: 86-1-9357008, e-mail: "[ciaednp@oxihep.ihep.cern.ch](mailto:ciaednp@oxihep.ihep.cern.ch)".].