

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

ACCOMPANYING THIS NEWSLETTER :

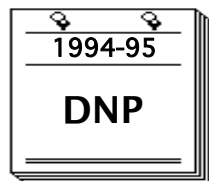
- A Bonner Prize Fund Donation Form.

18-22 APRIL APS MEETING, CRYSTAL CITY, VA

- A listing of the Symposia of the DNP, the invited speakers, and titles of their talks.

26-29 OCTOBER DNP MEETING, WILLIAMSBURG, VA

- A nomination form for invited speakers.
- A pre-registration form which includes workshops and banquet.
- A housing form.



Future Deadlines

- **1 April 1994** - APS Fellowship Nominations (See item 12).
- **29 April 1994** - Nomination forms for invited speakers for the Williamsburg Fall Meeting (See item 11).

- **18 June 1994** - Contributed Abstracts for the Williamsburg Fall Meeting (See item 11).
- **1 Sept. 1994** - Nominations for 1995 Bonner Prize (See item 5).

**1. RESULTS OF ELECTION:
OFFICERS AND EXECUTIVE
COMMITTEE FOR 1994**

By the deadline date of 15 January 1994, 775 properly identified ballots were received for the election of officers and members of the Executive Committee. The results of the election are as follows: J. Dirk Walecka was elected as Chair-Elect, Lee L. Riedinger was elected as Vice-Chair and Virginia R. Brown was elected as Secretary-Treasurer for one year terms. A. Baha Balantekin, Elizabeth J. Beise and Glenn R. Young were elected to two-year terms on the Executive Committee. The counting of the ballots was supervised by Tellers, Marshall Blann, Larry Cox, David Krofcheck, Robert G. Lanier, S. John Luke, T. Craig Sangster, and Ellen Sturmer all of LLNL. The members of the 1994 Executive Committee are as follows:

Carl B. Dover, BNL, Chair (1995)
Noemie Benczer-Koller, Rutgers University, Past-Chair (1995)

J. Dirk Walecka, CEBAF, Chair-Elect (1995)

Lee L. Riedinger, Univ. of Tennessee, Vice-Chair (1995)

Virginia R. Brown, LLNL, Secretary-Treasurer (1995)

Stephen E. Koonin, Caltech, Division Councilor (December, 1995)

Peter Paul, SUNY at Stony Brook, Division Councilor (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)

2. COMMITTEES OF THE DNP

The terms of some of the members of the following DNP committees expire in April 1994: Program, Fellowship, Nominating, Nuclear Science Resources, and "Physics News". Suggestions from the DNP membership for new members of these committees for 1994 are welcome and should be sent to Noemie Benczer-Koller. Members of these committees for 1994 will be listed in the May newsletter.

3. 1994 BONNER PRIZE WINNER

Dr. Ernest K. Warburton has been awarded the 1994 Tom W. Bonner Prize in Nuclear Physics. The citation reads as follows:

"For pioneering contributions to our understanding of the structure of light nuclei via the development and exploitation of experimental techniques in nuclear spectroscopy

combined with theoretical analyses. In particular, his development of the gamma-gamma directional correlations measurements for extracting multipolarity information for in-beam gamma-ray spectroscopy, his pioneering measurements of nuclear lifetimes with Doppler shift methods, his development of methods of deducing multipolarities from the correlation of pairs in internal conversion, and his experimental and theoretical studies of first-forbidden beta decay which show strong evidence for mesonic contributions to the weak axial current."

Dr. Warburton with the title, "*Meson Enhancement of the Axial Charge in the Nuclear Medium*", will present his Bonner Prize lecture at the Spring APS Meeting in Session G1 at 14:30 on Tuesday, 19 April 1994, in the Regency A&B room of the Hyatt Regency Crystal City (see the accompanying list of DNP Symposia for details). The 1994 Bonner Prize Committee consists of B. Balantekin (Chair), F. Calaprice (Vice-Chair), J. A. Cizewski, S. Kowalski and R. E. Pollock.

4. 1994 DISSERTATION AWARD

The Dissertation Award of the Division of Nuclear Physics of the American Physical Society will be awarded to Dr. Zhiping Zhao for her thesis entitled, "*The Astrophysical S-Factor of $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ from Beta-Delayed Alpha-Particle Emission of ^{16}N* ", (Yale University, 1993)

The Citation reads as follows:

"For her measurement and analysis of the spectrum of low energy alpha's following the beta decay of ^{16}N , an experiment that presented a significant technical challenge. Her results form a key stepping stone in the understanding of the creation of carbon and oxygen in stars and of the evolution of massive stars through their supernova stage, a problem of major importance in nuclear astrophysics."

Dr. Zhao's thesis advisor was Professor Moshe Gai of Yale University. Dr. Zhao, currently at the University of Washington, will give the Dissertation Award lecture with the above thesis title in Session G1 on Tuesday, 19 April 1994, at 14:30 in the Regency A&B room of the Hyatt Regency Crystal City at the Spring 1994 APS Meeting in Crystal City, Virginia.

A total of four candidates, three experimentalists and one theorist, were nominated for the award. The selection Committee (W. Haxton, B. Holstein, E. Hungerford, N. Benczer-Koller (Chair) and J. Rapaport) felt that while few dissertations were presented for the award, the ones received represented very distinguished accomplishments.

The Committee would like to encourage the community to support and nurture emerging young scientists and to recommend their thesis work early in the selection process. The deadline for the 1996 Dissertation Award will be 1 *September 1995*.

5. 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. 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, 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.

Bonner Prize Funding Deficit

The Tom W. Bonner Prize, which consists of \$5000 and a certificate citing the contributions made by the recipient, is awarded annually. On June 30, 1989, the fund balance stood at \$8,142, enough for one more prize in 1990. The prize was replenished in 1990 under the direction of R. A. Eisenstein. The contributors included private corporations, universities and laboratories, and individuals. A list of contributors was published in the May 1990 Newsletter. A recent funding drive spearheaded by N. Benczer-Koller has been very successful, and the DNP is most appreciative. In spite of this, we are still somewhat short of our goal to make the prize fund self-sustaining. A form that can be used for this purpose is included with this newsletter. Please make out your check to the DNP Bonner Prize Fund and send it to V. R. Brown, DNP Secretary-Treasurer, LLNL, L-288, Livermore, CA 94550.

6. 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.

7. NEW DNP FELLOWS

The following DNP members are newly elected Fellows of the APS. The award certificates will be presented by the DNP Chair, N. Benczer-Koller at the DNP Business Meeting. (See item 9.)

<i>James B. Ball</i>	<i>James S.</i>
<i>McCarthy</i>	
<i>Janusz Dabrowski</i>	<i>Robert D.</i>
<i>McKeown</i>	
<i>Jay Clarence Davis</i>	<i>David John</i>
<i>Millener</i>	
<i>George Dennis Dracoulis</i>	<i>Jen-Chieh</i>
<i>Peng</i>	
<i>Donald F. Geesaman</i>	<i>Philip</i>
<i>Grisier Roos</i>	
<i>Peter Herczeg</i>	<i>Brian David</i>
<i>Serot</i>	

Roy J. Holt
Tanihata
Frieder Lenz
Ernest Turchinetz

Isao

William

contributed abstracts were arranged into sessions by: Noemie Benzcer-Koller (Rutgers), Jolie Cizewski (Rutgers), and Willem Kloet (Rutgers).

8. 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 16-19 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.

9. SPRING APS MEETING, CRYSTAL CITY, 18-22 APRIL 1994

The Division of Nuclear Physics has arranged six symposia of invited papers for the Spring meeting. In addition, five joint symposia with the Division of Particles and Fields, the Division of Beams Physics, the Fundamental Constants Topical Group, the Few Body Systems & Multiparticle Dynamics Topical Group, and the Division of Astrophysics have been organized. The times locations and titles of these sessions along with the speakers and the titles of their talks are listed at the end of this newsletter. There are 16 DNP contributed sessions for the Spring meeting. The

The Business Meeting of the DNP is scheduled for 16:54, Tuesday, 19 April in the Regency Ballroom A&B of the Hyatt Regency Crystal City following Session G1. The current agenda includes:

- A. Fellowship Awards
- B. 1994 Bonner Prize
Congratulations
- C. Dissertation Award
- D. New Officers and Executive
Committee
- E. Invited Sessions for the DNP
Fall Meeting in Williamsburg
- F. New Program Committee
- G. DNP Brochure
- H. Budget Updates and Other
Matters; Reports and
Discussions with DOE and NSF
Representatives
- I. Report from the NSAC Chair (Long
range planning activities and
other matters discussed at the
recent NSAC meeting.)

10. TUTORIAL PRESENTED BY THE DNP AT THE APS CRYSTAL CITY MEETING, C. B. DOVER

Title of tutorial: VISTAS IN NUCLEAR PHYSICS

Who should attend: This course is intended to acquaint scientists with recent key developments and frontier research areas in nuclear physics.

Course Description: This course consists of three parts. The first part will provide an overview of recent advances in our understanding of nuclear structure, as well as physics motivations and prospects for future research. The second part will focus on the study of nuclear matter at high densities and temperatures, emphasizing the knowledge gained from experiments with heavy ion beams at Brookhaven and CERN, and the possible signatures for a transition from hadronic matter to a plasma of quarks and gluons. In the third part, the uses of the nucleus as a laboratory for the study of fundamental processes will be elucidated, with emphasis on weak interactions and tests of the standard model.

TOPICS

- Advances in Understanding Nuclear Structure and Reactions in Extreme Environments; New Symmetries in Nuclear Spectra; Using New Detectors and Facilities to Test the Limits of Nuclear Stability with respect to Rotation, Temperature and Neutron/Proton Ratio.
- Dynamics of Hadronic Matter at High Density and Temperature, Chiral Symmetry Restoration and Deconfinement; Relativistic Heavy-Ion Collisions and the Transition to the Quark--Gluon Plasma Phase; Signatures of Plasma Formation; Interpretation of Measurements at Brookhaven and CERN Energies; Future Prospects for the Study of Hot, Dense Matter at the Relativistic Heavy-Ion Collider (RHIC).
- The Nucleus as a Laboratory for the Study of Fundamental Interactions; Weak Interaction Tests of the Standard Model; Symmetry Tests in Nuclei (Parity, Time--Reversal,

Charge Symmetry); Neutrino Masses, Mixing, and Charge Conjugation Properties (Double Beta Decay, Solar Neutrinos).

INSTRUCTORS

- **Kim Lister** is an Associate Professor of Physics at Yale University. His research interests are in nuclear spectroscopy, especially of nuclei far from stability and at high angular momentum, and in the development of techniques for these studies, such as particle and gamma detector arrays and recoil separators.
- **Carl Dover** is a Senior Scientist in the Nuclear Theory Group at Brookhaven National Laboratory. His research interests include relativistic heavy-ion physics, strange particle nuclear physics, and antimatter interactions with matter.
- **Wick Haxton** is a Professor of Physics at the University of Washington and Director of the Institute for Nuclear Theory. His principal research interests include the use of many-body systems to test symmetries, solar neutrinos and other nuclear astrophysics, weak interactions, and numerical techniques for nuclear and other many-body problems.

11. 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, Bush 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 five sessions of invited papers, a plenary session, and approximately 25 sessions of contributed papers. Subcommittees of the 1994 Program Committee will arrange two sessions of invited papers on topics selected at the April Program Committee meeting. Two "voted" sessions will be arranged by the Program Committee Chair. The Local Committee is arranging a session on "*Strangeness in Nucleons and Nuclei*". Topics include Parity Violating Electron Scattering, Photo and Electroproduction of Strange Particles, Hypernuclei, Hidden Strange ϕ Production, and Strangeness in Neutron Stars. 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 business meeting of the Division, meetings of user's groups of various laboratories, a banquet Friday, 28 October, and reception tours of CEBAF on Wednesday and Thursday 26 and 27 October. As discussed at the Asilomar DNP meeting in 1993, it is anticipated that a Long Range Planning Activity will be underway in which case there will be meetings to discuss the Long Range Plan.

Workshops

Prior to the Divisional Meeting, two workshops will be held on Wednesday, 26

October. 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**

- Polarized Electron Sources
- Polarimeters
- Targets: H, D, HD, ^3He
- G_E^n
- Δ Deformation
- Electroweak Form Factors
- Spin 'Crisis'

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**

- 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 17 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 a very popular with tourists. Special tours of Colonial Williamsburg, trips to colonial mansions, shopping at the Williamsburg Pottery, and trips to Bush 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 September 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).

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.

12. 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. H. Lustig 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 (See Item 7) and the awards are presented at the DNP Business meeting of the Spring APS meeting.

13. BUDGET UPDATE FROM THE NUCLEAR SCIENCE RESOURCES COMMITTEE, G. CRAWLEY AND L.L. RIEDINGER

At this writing, President Clinton has not yet submitted the administration budget to Congress, but is expected to do so by mid-February. Without concrete numbers, one can be confident that most budgets in the agencies pertaining to science and technology will be essentially flat. The only large increase is expected to be in the Department of Commerce associated with that agency taking an increasing lead on technology reinvestment and information superhighway programs. The Clinton Administration is shifting the pattern of R&D spending from a 60/40 split in favor of defense to an equal emphasis on civilian and defense research and development. Of course, within the "civilian" sector there is increasing emphasis on supporting an industrial policy that would help restore U.S. economic leadership, for example in the form of more strategic research devoted to the needs of industry. This has led to a strong debate in the country about the role and continued vitality of fundamental research, and nowhere is the anxiety more intense than with regard to the funding for the National Science Foundation. An NSF conference in Washington in mid-January was devoted to large research collaborations applied to the issue of industrial research needs. While the emphasis on partnerships with the private sector continues to increase, fears about healthy funding for fundamental science and engineering will escalate.

In the Department of Energy, a billion-dollar decrease in the total budget is rumored, with Science and Technology likely getting a small decrease. While the budget numbers are not yet known, a massive review is heavily on the minds of everyone funded by the DOE Nuclear Physics program. Around 140 university groups and 35 research groups from national laboratories will submit a briefing document by early February and then be assigned a time to appear before one of six review teams in Washington over a three month period in the spring. The evaluation panels are chaired by Peter Paul of Stony Brook and William Donnelly of MIT. The summary rating assigned by the panel for each reviewed group is bound to have an impact on future funding.

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

This new chart is now available. It contains basic data for some 3000 known isotopes in their stable, isomeric or radioactive states. In addition to the principal decay characteristics, experimental or theoretical mass defects are indicated. Overall, the chart presents approximately 30000 pieces of information. Each isotope is described in a square 19 mm on a side. The dimensions of the chart are 140 x 70 cm, printed both front and back. It appears in five colors corresponding to the decay modes and is the most complete and the cheapest of existing nuclear charts.

The literature cutoff date was March 31, 1993. The entire proceeds from sales at 40 FF (\$8 USA) will be given to the French Association For The Fight Against Mucoviscidosis.

The mode of payment (chart plus postal charges) will be indicated in the invoice accompanying the chart. For your orders please contact M.S. Antony, Centre Nucleaire, BP 20 CRO, 67307 STRASBOURG CEDEX 2, FRANCE FAX: 88 10 64 79 e-mail: *antony@frcpn11.bitnet*.

15. 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.

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.*

16. FUTURE CONFERENCES

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

"The Harmony of Physics Symposium, in honor of the 70th birthday of Professor Spartak Belyaev (Kurchatov

National Center, Moscow", to be held 9-11 May 1994 at the University of Pennsylvania, Philadelphia, PA. [For further information contact: "*belyaev@einstein.drexel.edu*".

"The First International Symposium on Symmetries in Subatomic Physics", to be held 16-18 May 1994 at Taipei, Taiwan, R.O.C. [For further information contact: Prof. W-Y. Pauchy Hwang, Department of Physics, National Taiwan University, Taipei, Taiwan 17064, R.O.C. fax: 886 (country code)-2-363 9984 or 886-2-362-0629, phone: 886-2-363 0231 ext. 3159 or 886-2-362 0635, Bitnet: "*a47b0002 @twnmoe10*".

"1994 Symposium on Radiation Measurements and Applications 8th in a Series", to be held 16-19 May 1994, at the University of Michigan, Ann Arbor, Michigan. [For further information contact: Helen Lum, Symposium Secretary, 3034 Phoenix Memorial Laboratory, The University of Michigan, Ann Arbor, Michigan 48109-2100

"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*".

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

"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 944720, e-mail: "wozniak@lbl.gov", phone: (510) 486-7852, fax: (510) 486-7983].

"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.

"International Symposia on High Energy Spin Physics and Polarization

**APS Meeting -- CRYSTAL CITY, VA
18-22 April 1994**

**SYMPOSIA OF THE DNP
Hyatt Regency Crystal City**

8:00 Monday, Regency A&B. (DNP/DPF).
A1. AT THE INTERFACE OF

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".

PARTICLE AND NUCLEAR PHYSICS,
B. Bonner, presiding.

G. Igo (UCLA), "An Update on the Spin Crisis: SMC Results".

O. Rondon-Aramayo (University of Virginia at Charlottesville), "Spin Structure Measurements on the Proton and Neutron at SLAC".

J. Collins (Penn State University), "QCD and Hard Scattering Processes in Polarized Hadron Scattering".

S. Gavin (BNL), "Disorienting the Chiral Condensate at RHIC".

M. D. Corcoran (Rice University), "The A-dependence of Hard Scattering".

11:00 Monday, Regency A&B. (DNP). B1. PHYSICS OF ONE AND TWO NUCLEON SYSTEMS, A. Sandorfi, presiding.

R. Amado (University of Pennsylvania), "The Nucleon-Nucleon Interaction in the Skyrme Model".

W. C. Louis (LANL), "Nucleon Strangeness and Neutrino-Proton Elastic Scattering".

X. Ji (MIT), "Momentum Transfer Dependence of the Nucleon's Spin-Dependent Structure Function $G_1(Q^2, \nu)$ ".

C. Thorn (BNL), "Quadrupole Deformation of the Δ from π Production and Compton Scattering of Polarized Gamma Rays".

14:30 Monday, Regency A&B. (DNP). C1. ADVANCES IN NUCLEON AND NUCLEAR FEW-BODY SYSTEMS, E. L. Tomusiak, presiding.

I. Blomqvist (University of Mainz), "First Results from MAMI".

V. Vento (Universita degli Studi di Trento and I.N.F.N.), "Quarks in Few Hadron Systems".

B. Schoch (University of Bonn), "Investigation of the $N\Delta$ Transition by Electroproduction on the Proton".

C. M. Hoffman (LANL), "Using Pions to Probe the Nucleon and Nuclear Few-Body System".

11:00 Tuesday, Potomac Ballroom I&II. (DNP/DAP) F6. PHYSICS OF COMPACT OBJECTS, A. Harding, presiding.

N. K. Glendenning (LBL), "Coexisting Confined and Deconfined Phases of a Neutron Star".

R. Epstein (LANL), "Neutron Star Superfluid Dynamics".

C. Thompson (CITA McLennan Labs), "Supercritical Magnetic Fields and Neutron Star Evolution".

M. Herant (University of California at Santa Cruz), "The Role of Convection in the type-II Supernova Mechanism".

14:30 Tuesday, Regency A&B. (DNP). G1. BONNER PRIZE AND DISSERTATION AWARD SESSION, N. Benczer-Koller, presiding.

Z. Zhao (University of Washington), "The Astrophysical S-Factor of $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ from Beta-Delayed Alpha-Particle Emission of ^{16}N ".

E. K. Warburton (BNL), "Meson Enhancement of the Axial Charge in the Nuclear Medium".

S. Penttila (LANL), "Parity Violation Measured with Epithermal Neutrons".

E. D. Davis (University of Stellenbosch), "Against Reductionism: Symmetry Tests in Complex Systems".

14:30 Tuesday, Regency Ballroom E. (DNP/DPB) G4. ACCELERATORS FOR NUCLEAR PHYSICS, E. W. Vogt, presiding.

R. E. Pollock (Indiana University), "IUCF - Accelerators, Physics Program and Future Plans".

R. York (Michigan State University), "Present Status and Future Possibilities at MSU-NSCL".

C. W. Leemann (CEBAF), "CEBAF: Present Status and Future Plans".

- S. Kowalski (MIT), "The MIT/Bates Accelerators: Facilities and Program".
 W.-T. Weng (BNL), "Status of AGS Heavy Ion Operation and RHIC Construction at BNL".
 J. J. Beveridge (TRIUMF), "Accelerated Radioactive Beams and TRIUMF Plans".

16:54 Tuesday, Regency A&B. BUSINESS MEETING OF THE DIVISION OF NUCLEAR PHYSICS, following Session G1.

- 8:00 Thursday, Regency A&B. (DNP). M1: PHYSICS FROM THE NEW GENERATION OF DETECTOR ARRAYS, J. A. Becker, presiding.
 C. Davids (ANL), "Recent Results from the Fragment Mass Analyzer at ATLAS".
 J. Beene (ORNL), "Studies of Giant Resonance Decay with Large Scintillator Arrays".
 C. Baktash (ORNL), "Superdeformation Band Termination and the Variety of Shapes in ^{82}Sr ".
 M. Brinkman (LLNL), "Decay Out of the Superdeformed Band: ^{194}Pb ".
 T. Lauritsen (ANL), "Decay of Superdeformed Bands".

11:00 Thursday, Regency A&B. (DNP/PMTG). N1: PRECISION MEASUREMENTS IN NUCLEAR BETA DECAY AND SPECIAL RELATIVITY, E. G. Adelberger, presiding.

- L. DeBraekeleer (University of Washington), "Measurement of Weak Induced Current in Mass 8 Nuclei".
 G. Huber (University of Mainz), "A New Test of Special Relativity Using Ions in a Storage Ring".
 E. Hagberg (Chalk River Labs), "Precision Measurements of the Vector Coupling Constant in β Decay".

- J. Sromicki (ETH Zürich), "Precise Measurement of the Time Reversal Violating R Coefficient in ^8Li Beta Decay".

14:30 Thursday, Regency A&B. (DNP). O1. WEAK INTERACTIONS AND TIME-REVERSAL SYMMETRY IN NUCLEI, P. Herczeg, presiding.

- J. Jacobs (Univ. of Montana), "New Limits on Time-Reversal Symmetry from the Measurement of the Electric Dipole Moment of ^{199}Hg ".
 H. V. Klapdor-Kleingrothaus (Max Planck Inst. für Kernphysik), "Enriched ^{76}Ge Double Beta Decay Detectors: Results from the Heidelberg-Moscow Experiment".
 I. S. Towner (Chalk River Laboratory), "Implications of Precision Superallowed Beta Decay Measurements".
 M. Hasinoff (TRIUMF), "Measuring the Induced Pseudoscalar Form Factor".

8:00 Friday, Regency A&B. (DNP/DCP).

Q1: FRONTIERS IN
COMPUTATIONAL NUCLEAR
PHYSICS, S. Umar, presiding.

- S. C. Pieper (Anl), "Many-Nucleon Systems with Realistic Forces".
- D. Dean (Caltech), "Monte Carlo Shell Model Calculations".
- C. Chinn (Vanderbilt University), "Basis Spline Hartree-Fock Calculations of Exotic Nuclei".
- S. Huang (MIT), "Evidence for Instantons in Light Hadron Structure from Lattice QCD".

11:00 Friday, Regency A&B. (DNP). R1:
FROM RELATIVISTIC HEAVY ION
COLLISIONS TO EXOTIC NUCLEI, J. Thomas, presiding.

- Y. Pang (BNL), "Can High Density Baryonic Matter be Detected at the AGS?".
- D. Kahana (Kent State University), "Collective Flow from the Intranuclear Cascade Model".
- W. Benenson (Michigan State University), "The Mass and Structure of ^{10}Li and ^{11}Li ".
- J. Dobaczewski (Warsaw University), "Nuclear Structure at the Proton and Neutron Drip Lines".