



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

ACCOMPANYING THIS NEWSLETTER:

- A Bethe Prize Fund Donation Form

**18-21 APRIL APS MEETING,
WASHINGTON, D.C.**

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

**25-28 OCTOBER DNP MEETING,
BLOOMINGTON, IN**

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



Future Deadlines

- **1 Apr 1995** - APS Fellowship Nominations (See item 12).
- **28 Apr 1995** - Nomination forms for invited speakers for the Bloomington Fall Meeting (See item 11).
- **16 June 1995** - Contributed Abstracts for the Bloomington Fall Meeting (See item 11).
- **1 Sept 1995** - Nominations for 1996 Bonner Prize (See item 4).

**1. RESULTS OF ELECTION:
OFFICERS AND EXECUTIVE
COMMITTEE FOR 1995**

By the deadline date of 13 January 1995, 635 properly identified ballots were received for the election of officers and members of the Executive Committee. The results of the election are as follows: Bunny C. Clark was elected as Vice-Chair and Virginia R. Brown was elected as Secretary-Treasurer for one year terms. Richard N. Boyd, Joseph I. Kapusta and Barbara V. Jacak were elected to two-year terms on the Executive Committee. The counting of the ballots was supervised by Tellers, John Becker, Marshall Blann, Luisa Hansen, T. Craig Sangster, and Ellen Sturmer all of LLNL. The members of the 1995 Executive Committee are as follows:

- J. Dirk Walecka, William & Mary and CEBAF, Chair (1996)**
- Carl B. Dover, BNL, Past-Chair (1996)**
- Lee. L. Riedinger, Univ. of Tennessee, Chair-Elect (1996)**
- Bunny C. Clark, OSU, Vice-Chair (1996)**
- Virginia R. Brown, LLNL, Secretary-Treasurer (1996)**
- 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)**

Richard N. Boyd, OSU, (1997)

Barbara V. Jacak, LASL, (1997)

**Joseph I. Kapusta, Univ. of
Minnesota, (1997)**

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 1995: Program, Fellowship, Nominating, Nuclear Science Resources, and "Physics News". Suggestions from the DNP membership for new members of these committees for 1995 are welcome and should be sent to J. Dirk Walecka. Members of these committees for 1995 will be listed in the May newsletter.

3. 1995 BONNER PRIZE WINNER

Dr. Felix Boehm has been awarded the 1995 Tom W. Bonner Prize in Nuclear Physics. The citation reads as follows:

"For his pivotal contributions to our understanding of the weak interaction and fundamental symmetries in the nucleus. We especially note 1) his measurements of positron polarization in beta decay and their impact on the development of the V-A theory of weak interactions, 2) his pioneering studies providing convincing evidence for parity violation in nuclear transitions, and 3) his frontier defining searches for violations of time-reversal invariance in nuclei and for neutrino oscillations."

4. NOMINATIONS FOR 1996 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 Middleton and W. Haeberli, R. M. Diamond and F. S. Stephens, B. L. Cohen, G. E. Brown, C. D. Goodman, H. A. Enge, E. G. Adelberger, L. M. Bollinger, B. Frois and I Sick, R. H. Davis, E. M. Henley, V. W. Hughes, P. Twin, H. G. Blosser and R. E. Pollock, A. Arima and F. Iachello, E. K. Warburton, and F. Boehm.

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 1995** to: Prof. F. P. Calaprice, Department of Physics, Jadwin Hall, Princeton University, P. O. Box 708, Princeton, NJ 08544.

5. 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.

6. NEW DNP FELLOWS

The following DNP members are newly elected Fellows of the APS. The award certificates will be presented by the DNP Chair, J. Dirk Walecka, at the DNP Business Meeting. (See item 8.)

<i>John M. Alexander</i>	<i>Kuniharu Kubodera</i>
<i>A. Baha Balantekin</i>	<i>Berndt Mueller</i>
<i>R. Russell Betts</i>	<i>Witold Nazarewicz</i>
<i>Peter Braun-Munzinger</i>	<i>Costas N. Papanicolas</i>
<i>Karl A. Erb</i>	<i>Akunuri V. Ramayya</i>
<i>Harold E. Jackson</i>	<i>Dan-Olof W. Riska</i>
<i>Che-Ming Ko</i>	<i>Susan J. Seestrom</i>

7. FUTURE DNP FALL MEETINGS

The present schedule for fall meetings is as follows:

1995	October 25-28 Bloomington, IN
1996	October 2-5 Cambridge, MA
1997	October 5-8 Vancouver, B.C.
	(Chateau Whistler)

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.

**8. SPRING APS MEETING,
WASHINGTON, D.C., 18-
21 APRIL 1995**

The 1995 APS Spring Meeting will be held in Washington, D.C., 18-21 April at the Ramada Renaissance Techworld Hotel. The Division of Nuclear Physics has arranged five symposia of invited papers for the Spring meeting. In order to give the DNP membership an opportunity to hear and respond to the Interim Report, it was decided to devote one DNP invited session to a presentation of the Interim Report on the new Long Range Plan. In addition, six joint symposia have been organized with the Division of Particles and Fields, the Division of Astrophysics, the Division of Beams Physics, the Fundamental Constants Topical Group, the Few Body Systems & Multiparticle Dynamics Topical Group, and the Division of Atomic and Molecular Physics. In addition, a memorial session in honor of Julian Schwinger has been organized jointly by the Division of Particles and Fields and the Division of Nuclear

Physics. The DNP organizer is Herman Feshbach.

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 contributed abstracts were arranged into sessions by: Noemie Koller (Rutgers), Betsy Beise, Steven Wallace and J. J. Griffin (University of MD).

The Business Meeting of the DNP is scheduled for 16:54, Thursday, 20 April in the South Salon of the Ramada Renaissance Techworld Hotel following Session K2. The current agenda includes:

- A. 1995 Bonner Prize
Congratulations
- B. Fellowship Awards
- C. New Officers and Executive
Committee
- D. New Program Committee
- E. Invited Sessions for the DNP
Fall Meeting in
Bloomington
- F. Budget Updates and Other
Matters; Reports and
Discussions with DOE and NSF
Representatives
- G. Report from the NSAC Chair

Other highlights of the Spring Meeting include a memorial session for Wigner on Tuesday evening. See the invited sessions list in this newsletter for more information. In addition, a Special Reception for Students will take place on Tuesday at 5:30 p.m. in Room 12. An interesting program is being planned.

**9. TUTORIALS FOR THE APS SPRING
MEETING AT WASHINGTON, D.C.,
17 APRIL 1995**

Who should attend: This course is intended to acquaint scientists with recent key developments and frontier research areas in nuclear physics. The presentation will be pedagogical and is intended for young scientists, including graduate students and postdoctoral appointees, as well as senior scientists who would like to learn about a new field. It will be held on Monday, 17 April at 1:00 p.m.

Topic 1: Electron scattering and the nuclear charge and current densities; extending the power of electron scattering through coincidence experiments; the determination of weak neutral current densities from parity violating electron scattering; examples of applications of electron scattering to open problems in nuclear physics.

Instructor: Lawrence Cardman is the Deputy Associate Director for Physics at the Continuous Electron Beam Accelerator Facility. His research interests are in nuclear and nucleon structure, the electromagnetic interaction, and accelerator physics.

Topic 2: Quantum chromodynamics at finite temperature and density; behavior of matter below and above a deconfinement/chiral symmetry restoring phase transition or crossover. Dynamics of nucleus-nucleus collisions at Brookhaven's AGS and RHIC and at CERN's SPS and LHC; how to make connections between experiments performed at these accelerators and theoretical calculations for idealized systems of thermalized matter.

Instructor: Joe Kapusta is a Professor of Physics at the University of Minnesota. His research interests include the study of field theories, such as QCD and electro-weak, at finite temperature and density, and

the application of these theories to high energy nucleus-nucleus collisions and cosmological phase transitions.

Topic 3: Dynamics of Hadronic Matter: Hadronic interactions at low energy; relativistic mean-field theory of nuclei; constraints from chiral symmetry. Properties of hot, dense, hadronic matter and their determinations from nucleus-nucleus collisions; theoretical interpretation of experiments.

Instructor: Brian Serot is a Professor of Physics at Indiana University and the Director of the IU Nuclear Theory Center. His principal research interests include relativistic many-body theory and its application to nuclear structure and reactions.

10. PUBLIC LECTURE AT THE 1994 FALL MEETING

The Division of Nuclear Physics organized a public lecture, "Solar Neutrino Problem : Is the Sun Going Out, or Is No 'nu's Good News?", presented by Hamish Robertson (U. Washington) during the 1994 Fall Meeting. Robertson emphasized that the solar neutrino results yield fairly strong and consistent indications of new physics. This lecture was intended to acquaint the general public with recent developments in this area of nuclear physics and, even though it was announced at a somewhat late stage, was well attended by the general public and the conference participants alike. A good number of local area high school general science and physics teachers were in the audience. The audience also included local high school students who received school credit. This public lecture was considered a success and a good format for the future by all those involved. We hope to organize similar public lectures presenting frontier research areas of nuclear physics in the future DNP meetings.

11. DNP FALL MEETING AT BLOOMINGTON, IN, 25-28 OCTOBER 1995

The Annual Fall Meeting of the Division of Nuclear Physics, including workshops, will be held 25-28 October 1995 at the Indiana University Memorial Union in Bloomington, Indiana. The beautiful woodland campus of Indiana University will still be awash in fall colors and the music program associated with the renowned music school will be in full swing. As part of the latter, there will be an opera on the Saturday night, 28 October 1995. For anyone interested in attending this, tickets should be requested well in advance. In addition to being a quintessential college town, Bloomington and the surrounding area are noted for artisans working in many media. Temperatures at the end of October are generally moderate with highs about 65°F.

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 1995 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 planning an invited session on "axial currents in nuclei." Topics will include axial exchange charge in pion production and absorption and in semi-leptonic processes, muon absorption in nuclei, meson exchange in beta decay, and heavy meson exchange in pion production and absorption. 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 users groups of various laboratories, a

banquet Friday, 27 October, and tours of IUCF.

Workshops

Two workshops to be held on 25 October prior to, but in conjunction with, the DNP meeting are being planned. One workshop will be on "Physics at the Transition...". The second will be on "Graduate Education in Nuclear Physics; Changing Goals for Changing Times". The workshops will run in parallel. A \$30 registration fee covers both workshops. Registration will begin on 24 October at 17:00 - 19:00 hours and will continue on 25 October at 08:00 hours.

The first workshop will address physics issues in the regime between low momentum transfer, where effective meson-exchange theories work well, and the perturbative regime where hadron-hadron interactions appear to be successfully described via individual hard collisions of the constituent partons. A central requirement of models for the transition regime is that they provide a unified framework for treating the non-trivial interplay between hadron substructure and hadronic interactions. These questions are central to the program at CEBAF and also will be the core for the LISS facility being proposed as the natural extension to fully exploit new techniques developed at the IUCF Cooler.

The second workshop will address potential changes in graduate education of nuclear physicists to meet the challenges of tomorrow. While similar questions are being addressed in a wider context elsewhere by the APS, this workshop will allow professionals and students to discuss the particular ramifications for nuclear physicists of the changing environment in which we work and live.

Abstracts for Contributed Papers

To provide sufficient time for printing abstracts in the Bulletin, the deadline for contributed abstracts is **16 June 1995**. Abstracts should conform to the format specified in the APS News and should be sent, in triplicate, to:

Dr. Virginia R. Brown
Secretary-Treasurer of the Division of
Nuclear Physics
Lawrence Livermore National
Laboratory; Mail Stop L-288
7000 East Avenue
Livermore, CA 94550

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.

Registration

On-site registration for the meeting will begin on October 24 at 17:00 - 21:00 hours and continue on 25 October from 08:00 - 21:00 hours. The pre-registration fees are \$100 for APS members, \$200 for non APS

members and \$10 for retired and unemployed members as well as students. The cost of the workshops is an additional \$30. The cost of registration will increase after the pre-registration date of **15 September 1995**.

Accommodations

Reservations for all conference hotels will be coordinated by the Indiana University Cyclotron Facility. The Conference Center is at the Indiana University Memorial Union; other hotels are about two miles from the Union.

Travel

Bloomington is best reached through the Indianapolis Airport which is about 45 miles away. The airport has rental car, taxi and limousine service. Details and maps will be sent to all pre-registered attendees.

Reception and Tour of IUCF

A reception at and tour of the Indiana University Cyclotron Facility will be held on Thursday, 26 October. Bus service will be provided from the Conference Center and hotels to IUCF and back.

Users Group Meetings

It is anticipated that many groups will wish to hold User Group Meetings during the fall meeting at IUCF. 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 the Local Organizing Committee by **23 June 1995**.

Meeting Information

For further information, please contact Ms. Sharon Herzog, DNP Conference, Indiana University Cyclotron Facility, 2401 Milo B. Sampson Lane, Bloomington, IN 47408. Telephone: (812) 855-9365; Fax: (812)

855-6645; E-mail:
DNP95@IUCF.INDIANA.EDU.

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 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 1995 DNP Fellowship Committee is comprised of Noemie Benczer-Koller (Chair), J. Matthews, S. J. Freedman and J. Ginocchio. 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.

13. 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 Council of the APS has recently supported this effort by granting permission to raise the needed funds. The APS specifies that a minimum of \$100,000 is required to endow a prize.

The goal of the Divisions is to complete the funding raising within the next year, so that the prize can be established prior to Hans' 90th birthday, July 2, 1996. A committee has been formed to work toward this goal. We believe that the affection of the community for Hans and the significance of his contributions to physics, industry, and government should make this task easier.

Hans recently presented a talk at the Washington APS meeting in which he described himself as a nuclear physicist and an astrophysicist. The prize is intended to reflect the breadth of Hans's interests, and will be awarded for outstanding work in either of these fields.

We are asking each member of the two Divisions to consider making a donation in support of the Bethe Prize. You will find enclosed in this newsletter a donation form that can be mailed to the DNP Secretary-Treasurer, Virginia R. Brown. We believe the broader the support for this effort, the more meaning the prize will have for Hans and for our community. Thank you.

14. BUDGET UPDATE FROM THE NUCLEAR SCIENCE RESOURCES COMMITTEE, L.L. RIEDINGER, CHAIR

The election of the 104th Congress in November has produced a profound political change, and its impacts on science and technology, and especially on basic research and nuclear physics, are very difficult to gauge at this early date. President Clinton submits the administration budget request for FY96 to the new Congress on or around February 6. The changes made by the Congress will likely be profound, but it is impossible to know how that will affect our field.

Republicans have taken the reins of the new Congress, in both the House and the Senate, which has produced a new cast of important members leading the key committees. In the House, Bob Livingston of Louisiana takes over as the powerful chair of the Appropriations Committee, and John Myers of Indiana leads the House Appropriations Subcommittee on Energy and Water Development. This subcommittee controls funding for High Energy and Nuclear Physics in the Department of Energy, and contains the following members (the lists are ordered by seniority).

Republicans:	Democrats:
John Myers (IN)	Tom Bevill (AL)
Harold Rogers (KY)	Vic Fazio (CA)
Joe Knollenberg (MI)*	Jim Chapman (TX)

Frank Riggs (CA)**
 Rodney Frelinghuysen (NJ)**
 Jim Bunn (OR)**
 *New Member of subcommittee
 **New Member of Congress

California Republican Jerry Lewis gains a position very important to the scientific community by taking over chairmanship of the House Appropriations Subcommittee on VA, HUD, and Independent Agencies. This is the subcommittee responsible for funding NSF and NASA, as well as EPA, the Veterans' Administration, Housing and Urban Development, and numerous other federal programs.

Republicans:	Democrats:
Jerry Lewis (CA)	Louis Stokes (OH)
Tom DeLay (TX)	Alan Mollohan
(WV)	
Barbara Vucanovic (NV)*	Jim Chapman (TX)
James Walsh (NY)*	Marcy Kaptur
(OH)	
David Hobson (OH)*	
Joe Knollenberg (MI)*	
Rodney Frelinghuysen (NJ)**	
Mark Neumann (WI)**	

In the Senate, Mark Hatfield of Oregon becomes the new chair of the Appropriations Committee, and Pete Domenici (NM) assumes the chair of the Energy and Water Development Appropriations Subcommittee.

Republicans:	Democrats:
Pete Domenici (NM)	Bennett Johnston
(LA)	
Mark Hatfield (OR)	Robert Byrd (WV)
Thad Cochran (MS)	Ernest Hollings
(SC)	
Slade Gorton (WA)	Harry Reid (NV)
Mitch McConnell (KY)	Bob Kerrey (NE)
Robert Bennett (UT)*	Patty Murray
(WA)	
Conrad Burns (MT)*	

The chair of the Senate Appropriations Subcommittee on VA, HUD, and Independent Agencies is Kit Bond of Missouri. The members are:

Republicans:

Kit Bond (MO)
(MD)

Phil Gramm (TX)

Conrad Burns (MT)
(LA)

Ted Stevens (AK)
(NJ)

Richard Shelby (AL)*

Robert Bennett (UT)*

Democrats:

Barbara Mikulski

Patrick Leahy (VT)

Bennett Johnston

Frank Lautenberg

Bob Kerrey (NE)

On the authorization side of the funding process, Bob Walker of Pennsylvania takes over as the new chair of the renamed House Science Committee, formerly led by George Brown. This committee has considerable influence in setting priorities for programs in science through its authorization process. The Basic Research subcommittee is chaired by Steven Schiff (NM) and includes jurisdiction over NSF programs, while the Energy and Environment subcommittee is led by Dana Rohrabacher (CA) and watches over DOE science programs. Over the years Mr. Walker has been a strong supporter of basic research and a real opponent of earmarking of special projects in the appropriations process. While it is thought that the Clinton Administration emphasis on programs to help technology development in industry might suffer significantly in the Science Committee (and in the appropriations process), there is optimism that basic research will prosper, at least comparatively. Mr. Walker has led hearings where it has become clear that in his view the federal government should support basic research but should not directly "interfere" in the industrial choice of the best technologies to pursue. Instead the federal government should focus on regulatory and tax policies

that would provide incentives for industry to pursue their own strategic R&D.

While we wait for the process to begin on the FY96 appropriations, there are early indications that cuts will be plentiful. In December the President announced that he would work toward \$10.6B in cuts in the DOE budget over the next five years. The current DOE funding is \$17.7B, so this represents substantial reductions. While it was the applied energy and environmental restoration programs that were primarily signaled for cuts, there is worry about the effects on basic science in DOE.

15. DNP BROCHURE, G. M. CRAWLEY

With the completion and printing of the brochure, the next challenge is distribution. The distribution of copies to about fourteen different categories of people is well underway. These include Government agencies such as DOE and NSF, Chairs of about 550 Physics departments, Directors of national labs both in the U.S. and overseas, Officers of other APS divisions, members of HEPAP as well as selected science writers and industrial contacts. A mailing to all the members of the 104th Congress is proceeding as I write this. There have been numerous requests for additional copies, many from overseas and a request already to translate the brochure into French. My belief is that the brochure is most effective when combined with personal contact. Therefore I would again urge members of the Division to write for additional copies, to share with members of their University administration as appropriate and with their Congressional representatives when the representative or senator is back in their home district.

16. NSAC REPORT, J. D. WALECKA

The long-range planning activities described in the November, 1994 DNP Newsletter are proceeding rapidly. A series of town meetings sponsored jointly by the

DNP and NSAC were announced in a mailing to the community on December 7, 1994. These meetings are currently taking place. The Long-Range-Plan Working Group (LRPWG) has now been established by NSAC with input from the DNP. The membership is given below. There are ten working groups, mapping closely the anticipated structure of the LRP. Each member of the LRPWG has been assigned to one writing group.

The next NSAC meeting will be held on February 24-25 in Washington. The chairs of the working groups will present a "straw-man" outline of their plans for a white paper. These papers will evolve into pieces of the LRP. Input will include the white papers generated by the town meeting conveners. On February 23, immediately preceding the NSAC meeting, there will be a meeting of the facilities working group to hear presentations from the laboratories concerning facility status, needs, and plans.

The LRPWG meeting will be held at Cal Tech, starting with an organizational meeting on the evening of March 16 and ending at noon on March 21. The writing groups will be asked to prepare drafts in advance of the Cal Tech meeting. The LRPWG represents a very diverse set of interests and perspectives. It is important that our 1995 LRP is one which gathers the support of a broad community within the boundary conditions presented by our charge.

One of the invited sessions at the 1995 APS meeting in Washington, D.C., April 18-21, 1995, is being devoted to the "Interim Report on the Long-Range Plan for Nuclear Physics". Carl Dover, Chair of the DNP, will chair the session. The abstract for that session is:

"The interim report on the updated NSAC Long Range Plan for Nuclear Physics will be presented to the community for discussion and comment before submission to the funding agencies. The presentation will be coordinated by E. Moniz, chair of NSAC."

The NSAC subcommittee to examine the proposal for Additional Experimental Equipment for the RHIC Program has now been established (see November, 1994 DNP Newsletter). Its members are K. Gelbke (MSU), Chairman, G. Bertsch (U. Washington), D. Bryman (TRIUMF), J. Schukraft (CERN), D. Geesaman (ANL), M. Marx (SUNY at Stony Brook), and B. Mueller (Duke U.).

17. NSAC/DNP TOWN MEETINGS, E. MONIZ AND J. D. WALECKA (Mailing of Dec. 7, 1994)

As most of you know, the DOE/NSF Nuclear Science Advisory Committee (NSAC) has been charged with generating a new Long Range Plan. As with previous plans, we expect that this activity will have a very significant impact on the development of our field through the rest of the decade. A primary vehicle is a set of town meetings organized for late January and early February. The schedule, steering committee, lead contact, and some agenda items are attached. Each group will be mailing more complete agendas to interested parties soon. If you do not receive more detailed information about a town meeting in which you are particularly interested, please inquire directly of the designated contact or other committee member. Also, an NSAC Home Page is being set up to allow direct access to the material.

Note that three of the town meetings (Electrons, Hadrons, Theory) are all being held at Argonne during the period January

27-30. The conveners thereby hope to minimize travel and maximize input for those interested in contributing to more than one.

Again, we urge input. Contact the steering committees for input into the

Town Meeting Schedule

1. Electromagnetic Probes

Steering Committee: L. Cardman (CEBAF), T. W. Donnelly (MIT), R. Holt (Illinois), R. Lourie (Virginia), R. McKeown (Cal Tech), A. Sandorfi (BNL), R. Schumacher (Carnegie-Mellon)

Contact: L. Cardman
cardman@cebaf.gov
Time and Place: January 27-28, 1995; Argonne
Agenda items: Nucleon structure; QCD in Nuclei; Nuclear Structure; Facilities

2. Intermediate and High Energy Hadron Probes

Steering Committee: D. Bryman (TRIUMF), D. Geesaman (Argonne), D. Hertzog (Illinois), M. Johnson (LANL), D. Pocanic (Virginia), R. Redwine (MIT), B. Serot (Indiana), S. Vigdor (Indiana)

Contact: S. Vigdor
vigdor@iucf.indiana.edu
Time and Place: January 29-30, 1995; Argonne
Agenda items: Hadron Structure; Hadronic Interactions; Hadrons in Nuclear Matter; Fundamental Interactions; Facilities

3. Nuclear Structure, Low Energy Reactions, and Radioactive Beams

Steering Committee: R. Castner (BNL), C. Howell (Duke), R. Janssens (ANL), W. Nazarewicz (Tennessee), P. Parker (Yale), B. Sherrill (Michigan State), F. Stephens (LBL)

Contact: C. Howell
howell@tunl.duke.edu
Time and Place: January 19-21, 1995; TUNL
Agenda items: Exotic Nuclei and Secondary Beams; High Spins; Hot Nuclei; Light-Ion Reactions; Low-Spin Spectroscopy; Fundamental Symmetries; Sub-Barrier Reactions; Nuclear Astrophysics; Nuclear Data; New Initiatives; Facilities and Technologies

4. Intermediate and High Energy Heavy Ion Collisions

agenda. Attend the Town Meetings for participation in the dialogue. In addition, some groups may wish to hold additional workshops on focused areas and generate white papers for direct input into NSAC. This is also most welcome.

Steering Committee: W. Bauer (Michigan State), M. Gyulassy (Columbia), J. Harris (LBL), W. Lynch (Michigan State), J. Natowicz (Texas A&M), J. Stachel (Stony Brook), W. Zajc (Columbia)

Contact: W. Lynch
h-ions@rudolf.nscl.msu.edu
Time and Place: January 27-28, 1995; Brookhaven
Agenda items: Dynamics of Nuclear Collisions; Hot Nuclei and Liquid-Gas Phase Transition; Nuclear Matter at Extreme Densities; Quark-Gluon Plasma
Housing Contact: Ms. Bonnie Sherwood
rhicuser@bnldag.ags.bnl.gov
Phone: (516) 282-4901

5. Electroweak Interactions, Astrophysics, and Non-Accelerator Experiments

Steering Committee: B. Balantekin (Wisconsin), D. Bowman (LANL), S. Freedman (Berkeley), T. Goldman (LANL), G. Greene (NIST), H. Robertson (Washington)

Contact: D. Bowman
bowman@lanl.gov
Time and Place: February 4-5, 1995; Berkeley
Agenda items: Astrophysics; Neutrino Physics; Non-Accelerator Physics; Neutron Weak Interactions and Decays; Symmetry Tests in Nuclei; Symmetry Tests in Atoms; Rare Decays

6. Theory

Steering Committee: G. Bertsch (Seattle), J. Friar (Los Alamos), F. Iachello (Yale), B. Mueller (Duke), J. Negele (MIT), V. Pandharipande (Illinois), S. Koonin (Cal Tech)

Contact: B. Mueller
muller@phys.duke.edu
Time and Place: January 29-30, 1995; Argonne
Agenda items: All areas of theoretical physics relevant to the above. Includes solving QCD: Hadron Structure, Quark-gluon Plasma; Effective Theories; Advances in Many-Body Theory

NSAC Home Page

The following is how to access the NSAC Home Page on the World Wide Web. The pointer to the NSAC Home Page can be found within the directory of the Nuclear Physics Program of the PHY Division of the NSF. The following path will lead you there:

Go to the NSAC Home Page and select "Starting Points for Internet Exploration". Select the "Web Servers Directory," and then step through:

USA - Federal Gov't Servers
Executive Branch

Independent Agencies (towards end of Exec. Branch list)
National Science Foundation
NSF Directorates, Offices, and Programs
Directorate for Mathematical & Physical Sciences
Division of Physics
Nuclear Physics Program

Alternatively, the url address is

<http://www.nsf.gov/mps/phy/nuclear.htm>

We expect this service to be in place by December 15. The home page will contain a schedule of NSAC activities, such as Town Meetings, NSAC meetings, and sub-committee meetings and a list of NSAC members. It will also contain pointers to any documents that NSAC would like to make available during this Long Range Planning process.

Please contact Steve Steadman at ssteadma@nsf.gov if you have any suggestions or comments.

NOTE: A "browser" (the program that allows a person to read the information on the World Wide Web) must be obtained if you don't already have it. One commonly used browser is Mosaic. The University of Illinois holds the copyright for the software but it is free for academic and research use. The binaries for all three platforms (Macintosh, MS Windows and X) can be downloaded from the NCSA anonymous ftp server, <ftp.ncsa.uiuc.edu>.

18. NSAC LONG RANGE PLAN WORKING GROUP, E. MONIZ

*NSAC Long Range Plan Working Group (*NSAC Member)*

- | | |
|------------------------------|-----------------------------|
| 1. E. Moniz (MIT)*, Chair | 33. R. Holt (Illinois) |
| 2. E. Adelberger (Wash.)* | 34. C. Howell (Duke)* |
| 3. P. Baisden (LLNL)* | 35. F. Iachello (Yale) |
| 4. K. Baker (Hampton) | 36. N. Isgur (CEBAF) |
| 5. D. Balamuth (Penn) | 37. B. Jacek (LANL) |
| 6. W. Benenson (MSU)* | 38. N. Koller (Rutgers)* |
| 7. G. Bertsch (Wash/INT) | 39. S. Koonin (Cal Tech) |
| 8. E. Beise (Maryland) | 40. R. Lacey (Stony Brook) |
| 9. P. Bond (BNL)* | 41. R. Lourie (Virginia) |
| 10. D. Bowman (LANL)* | 42. W. Lynch (MSU) |
| 11. D. Bryman (TRIUMF)* | 43. J. McClelland (LANL) |
| 12. F. Calaprice (Princeton) | 44. R. McKeown (Cal Tech)* |
| 13. J. Cameron (Indiana) | 45. B. Mecking (CEBAF) |
| 14. L. Cardman (CEBAF)* | 46. B. Mueller (Duke)* |
| 15. R. Casten (BNL) | 47. S. Nagamiya (Columbia)* |
| 16. A. Champagne (UNC) | 48. W. Nazarewicz (Tenn) |
| 17. B. Clark (OSU) | 49. J. Negele (MIT) |
| 18. T. Cormier (Wayne State) | 50. P. Paul (Stony Brook) |
| 19. J. Dairiki (LBL) | 51. D. Pocanic (Virginia) |
| 20. J. Davis (LLNL) | 52. R. Redwine (MIT) |
| 21. C. Dover (BNL) | 53. M. Riley (FSU) |

- | | |
|-----------------------------|-------------------------------|
| 22. J. Duggan (No. Texas) | 54. H. Robertson (Wash) |
| 23. S. Freedman (Berkeley) | 55. J. Schiffer (ANL/Chicago) |
| 24. J. Garrett (ORNL)* | 56. B. Serot (Indiana) |
| 25. D. Geesaman (ANL) | 57. J. Stachel (Stony Brook)* |
| 26. K. Gelbke (MSU) | 58. F. Stephens (LBL) |
| 27. M. Gyulassy (Columbia) | 59. R. Tribble (Texas A&M) |
| 28. J. Harris (LBL)* | 60. S. Vigdor (Indiana)* |
| 29. W. Haxton (Wash/INT) | 61. D. Walecka (Wm & Mary)* |
| 30. W. Haeberli (Wisconsin) | 62. G. Young (ORNL) |
| 31. W. Henning (ANL)* | 63. C. H. Yu (Rochester) |
| 32. D. Hertzog (Illinois) | 64. W. Zajc (Columbia) |

Long Range Plan Writing Groups

1. **Nuclear Structure and Dynamics: Pushing at the Limits**
W. Henning (ANL), Chair, D. Balamuth (Penn), L. Cardman (CEBAF), R. Casten (BNL), F. Iachello (Yale), M. Riley (FSU), C.-H. Yu (Rochester)
2. **To the Quark Structure of Matter**
R. McKeown (Cal Tech), Chair, C. Dover (BNL), D. Geesaman (ANL), R. Holt (Illinois), N. Isgur (CEBAF), J. Negele (MIT), D. Pocanic (Virginia)
3. **The Phases of Nuclear Matter**
B. Mueller (Duke), Chair, M. Gyulassy (Columbia), B. Jacek (LANL), R. Lacey (Stony Brook), W. Lynch (MSU), J. Stachel (Stony Brook), W. Zajc (Columbia)
4. **Fundamental Interactions and Nuclear Astrophysics**
E. Adelberger (Washington), Chair, F. Calaprice (Princeton), A. Champagne (UNC), D. Bowman (LANL), S. Freedman (Berkeley), W. Haxton (INT), S. Vigdor (Indiana)
5. **Facilities, Instrumentation, and Technology**
B. Mecking (CEBAF), Chair, W. Benenson (MSU), W. Haeberli (Wisconsin), J. McClelland (LANL), H. Robertson (Washington), G. Young (ORNL)
6. **International Collaboration in Nuclear Science**
J. Garrett (ORNL), Chair, D. Bryman (TRIUMF), J. Harris (LBL), D. Hertzog (Illinois), S. Nagamiya (Columbia), W. Nazarewicz (Tenn)
7. **Graduate Education**
R. Redwine (MIT), Chair, E. Beise (Maryland), G. Bertsch (Wash), J. Cameron (Indiana), C. Howell (Duke), B. Serot (Indiana)
8. **Undergraduate Education, Outreach & Scientific Literacy**
N. Koller (Rutgers), Chair, K. Baker (Hampton), P. Baisden (LLNL), B. Clark (OSU), R. Lourie (Virginia), T. Cormier (Wayne State)

9. **Interdisciplinary and Societal Applications**

K. Gelbke (MSU), Chair, J. Dairiki (LBL), J. Davis (LLNL), J. Duggan (No. Texas), P. Paul (Stony Brook), S. Koonin (Cal Tech)

10. **Nuclear Physics Funding**

E. Moniz (MIT), Chair, P. Bond (BNL), J. Schiffer (ANL), D. Walecka (W&M/CEBAF), F. Stephens (LBL), R. Tribble (Texas A&M)

19. **FUTURE PROGRAMS OF THE INSTITUTE FOR NUCLEAR THEORY**

The 1996 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.

1996 schedule of programs:

INT-96-1: **Quark and Gluon Structure of Nucleons and Nuclei**
February 20 - May 31, 1996

Organizers: Xiangdong Ji [xdj@mitlns.mit.edu, 617-253-5723], David Kaplan [dbkaplan@phys.washington.edu, 206-685-3546], Jerry Miller [miller@phys.washington.edu, 206-543-2995], Tony Thomas [athomas@physics.adelaide.edu.au, 61-8-303-5113].

INT-96-2: **Nucleosynthesis in the Big Bang, Stars, and Supernovae**
June 24 - August 30, 1996

Organizers: George Fuller [gfuller@ucsd.edu, 619-534-6329], Craig Hogan [hogan@astro.washington.edu, 206-685-2112].

INT-96-3: **Ultrarelativistic Nuclei: From Structure Functions to the Quark-Gluon Plasma**
September 16 - December 6, 1996

Organizers: Larry McLerran [mclerran@physics.spa.umn.edu, 612-624-7542], Miklos Gyulassy [gyulassy@nt1.phys.columbia.edu, 212-854-8152].

The previously scheduled 1995 programs are:

INT-95-1: **Chiral Dynamics in Hadrons and Nuclei**
February 21 - June 2, 1995

Organizers: Mannque Rho [rho@amoco.saclay.cea.fr, 33-1-6908-7469], Gerry Brown [popenoe@nuclear.physics.sunysb.edu, 516-632-7989], Barry Holstein [holstein@phast.umass.edu, 413-545-0320], Dong-Pil Min [dpmin@phyb.snu.ac.kr, 82-2-8806606].

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], Bill Marciano [marciano@bnlcl1.bnl.gov, 516-282-3151].

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

Organizers: Jerry Draayer [phdryr@lsuvm.sncc.lsu.edu, 504-388-2261], George Bertsch, [bertsch@phys.washington.edu, 206-543-2895], Witek Nazarewicz [witek@orph14.phy.ornl.gov, 615-576-8763].

Programs 95-1 and 95-2 are now filled; late applicants can apply to the organizers in case cancellations occur. Program 95-3 is still accepting applications.

20. SUMMER SCHOOL IN NUCLEAR PHYSICS

After a one-year hiatus, the national Summer School in Nuclear Physics will resume in 1995. The school's Steering Committee, headed by Jorgen Randrup, has asked the Institute for Nuclear Theory to administer the school for the next five years. George Bertsch, who served as P.I. for the original school when it first started, has agreed to assume this role again.

The 1995 school will be held on the University of Washington campus, June 18-30. The school is intended for advanced graduate students and beginning postdoctoral researchers. Both experimentalists and theorists are urged to apply.

The 1995 school will be somewhat different from past efforts in that the talks will be organized around the theme of Symmetries. The confirmed lecturers include Gerry Brown, Stuart Freedman, Joe Ginocchio, David Kaplan, Boris Kayser, Michael Musolf, and Ismail Zahed. The school will return to its usual format in 1996.

The school is sponsored by the National Science Foundation, by the Department of Energy through the INT, and by the Edwin Uehling Fund of the University of Washington. Scholarships are available to support most of the local expenses of students who attend.

The attendance is limited to approximately 50, and applications must be completed by April 1. Interested students should contact the INT at summer@phys.washington.edu or write

Physics Summer School in Nuclear
c/o Maria Francom
Institute for Nuclear Theory
NK-12
University of Washington
Seattle, WA 98195

for an application and additional information.

21. 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.

1994-95 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.*

22. FUTURE CONFERENCES

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

"Californium-252 Users' Workshop", to be held 17-20 April 1995, at Oak Ridge National Laboratory, Oak Ridge, TN. [For further information contact: Mr. C. W. Alexander, Oak Ridge National Laboratory, Oak Ridge, TN 37831, phone: (615) 574-

7071, fax: (615) 574-6008, e-mail: "alexandercw@ornl.gov".

"Real-Time Computer Applications in Nuclear, Particle and Plasma Physics (RT-95)", to be held 22-26 May 1995 at Michigan State University, East Lansing, MI. [For further information contact: Ron Fox, NSCL, Michigan State University, East Lansing, MI 48824-1321, phone: (517) 333-6349, fax: (517) 353-5967, e-mail: "fox@foxsun.nscl.msu.edu"] .

"New Perspectives in Nuclear Structure, 5th International Spring Seminar on Nuclear Physics", to be held 22-26 May 1995, in Ravello, Italy. [For further information contact: Aldo Covello, Dipartimento di Scienze Fisiche, Universita di Napoli Federico II, Mostra d'Oltremare, Pad. 20, I-80125 Napoli, Italy, phone: +39(81)7253402, fax: +39(81)2394508, e-mail: "covello@na.infn.it"].

"PANIC 96 - The XIV International Conference on Particles and Nuclei", to be held 22-28 May 1996, hosted by the College of William and Mary and CEBAF, to be held in historic Williamsburg, VA. [For further information contact: Conference Secretary, PANIC 96, CEBAF, 12000 Jefferson Avenue, Newport News, VA 23606, USA, phone: 804-249-7500, fax: 804-249-7363, e-mail: "panic@cebaf.gov"].

"Joint Meeting with CAP (Canada) and SMF (Mexico)", to be held 11-16 June 1995, Quebec City, Quebec, Canada. Abstract deadline: 2/28/95. [For further information contact: Francine Ford, Canadian Association of Physicists, Suite 903, 151 Slater Street, Ottawa, Ontario K1P 5H3, phone: (613) 237-3392, fax: (613) 238-1677, e-mail: "cap@physics.carleton.ca"].

"1995 Gordon Research Conference on Nuclear Chemistry", to be held 18-23 June

1995, Colby-Sawyer College, New London, New Hampshire. The focus of the conference will be on nuclear structure studies. [For further information contact: W. Nazarewicz, Joint Institute for Heavy Ion Research, Oak Ridge National Laboratory, Bldg. 6998, MS6374, P. O. Box 2008, Oak Ridge, TN 37831, phone: (615) 574-4580, fax: (615) 576-5780, e-mail: "witek@utkvx.utk.edu"].

"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), Physikalishes Institut, Universitaet Tuebingen, D-72076 Tuebingen, phone: +49-7071-296304/296297, fax: +49-7071-296296, e-mail: "me_nu95@pit.physik.uni-tuebingen.de"].

"1995 Gordon Conference on Nuclear Physics" to be held July 24-28, 1995, at the Tilton School, Tilton, New Hampshire. The focus of this conference will be on electromagnetic physics, relativistic heavy ion collisions, and astrophysics. Travel and application information and a preliminary program is available on the worldwide web <http://nucth.physics.wisc.edu/gordon/gordon.htm>. [For further information you can also contact: A.B. Balantekin, U. Wisconsin Physics Dept., 1150 University Avenue, Madison, WI 53706, phone: (608) 263-7931, fax: (608) 262-8628, e-mail: "baha@wisnud.physics.wisc.edu"].

"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"].

"XIV Mazurian Lakes School of Physics: Topics in nuclear and high energy atomic physics, 1995" to be held 23 August-2 September 1995, in Piaski, Poland. [For further information contact: Ziemowid Sujkowski (Chairman), Soltan Instiute for Nuclear Studies, PL-05-400 Swierk, Poland, e-mail: "p02zs@cx1.cyf.gov.pl", "sujkow@fuw.edu.pl" or Danka Chmielewska (Scientific Secretary), phone: 48-2-779-8627, fax: 48-2-779-3481, e-mail: "p02dc@cx1.cyf.gov.pl"].

"High angular momentum phenomena (Special workshop in honour of Zdzislaw Szymanski)" to be held 23-26 August 1995, in Piaski, Poland. [For further information contact: Ziemowid Sujkowski (Chairman), Soltan Instiute for Nuclear Studies, PL-05-400 Swierk, Poland, e-mail: "p02zs@cx1.cyf.gov.pl", "sujkow@fuw.edu.pl", Witek Nazarewicz (Co-chairman), phone: (615) 574-4580, email: "witek@utkvx.utk.edu", or Danka Chmielewska (Scientific Secretary), phone: 48-2-779-8627, fax: 48-2-779-3481, e-mail: "p02dc@cx1.cyf.gov.pl"].

"7th International Conference on the Structure of Baryons", 3-7 October 1995, to be held in Santa Fe, New Mexico. [For further information contact: Lenora Alsbrook, Baryons '95 Conference Coordinator, Los Alamos National Laboratory, Protocol Office, MS P366, Los Alamos, NM 87545, phone: (505) 667-8449, fax: (505) 667-7530, e-mail: "baryons@lampf.lanl.gov"].

"9th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics", 8-12 October 1996, to be held in Budapest, Hungary. [For further information contact: G. Molnar, Nuclear Physics Department, Institute of Isotopes, POB77, H-1525 Budapest, Hungary, phone:

36-1-275-4347, fax: 36-1-275-4349, e-mail:
"molnar@iserv.iki.kfki.hu"].

**APS Meeting – Washington, D.C.
18-21 April 1995**

**SYMPOSIA OF THE DNP
Ramada Renaissance Techworld Hotel**

- 8:00 Tuesday, North Salon (DPF/DNP)
A1. PARTICLE AND NUCLEAR PHYSICS, F. T. Avignone, presiding.
D. H. White (LANL), "Evidence For and Against Neutrino Oscillations".
N. W. Reay (Kansas State Univ.), "Expectations for Future Neutrino Oscillation Searches at Accelerators".
J. R. Johnson (Univ. of Wisconsin), "Status of Spin Structure Functions".
S. Kumar (Yale Univ.), "Strange Quark Matter".
- 8:00 Tuesday, South Salon. (DNP/DPB)
A2. APPLICATIONS OF NUCLEAR AND BEAM PHYSICS, J. A. Nolen, Jr., presiding.
W. Kutschera (Univ. of Vienna), "Perspectives of Accelerator Mass Spectroscopy".
R. O. Bangerter (LBL), "Ion Beam Inertial Fusion".
C. W. Leemann (CEBAF), "The Wonderful World of Electron Accelerators".
H. Geissel (GSI), "Experiments with Cooled Exotic Heavy Ion Beams at GSI".
- 11:00 Tuesday, South Salon. (DNP) B2. THE PHYSICS OF LARGE NUCLEAR DEFORMATION, L. L. Riedinger, presiding.
V. Janzen (Chalk River Nuclear Lab), "Intruder States and Enhanced Deformation".
M. P. Carpenter (ANL), "Detailed Spectroscopy in the Second Well".
- D. Sarantites (Washington Univ.), "Use of the Microball for Studies of Super- and Hyper-Deformation".
P. H. Heenen (Universite' Libre de Bruxelles), "Microscopic Theory of Nuclear States - Normal and Superdeformed".
- 11:00 Tuesday, West Salon A. (DNP/DAP)
B4. COSMIC RAYS, K. Lesko, presiding.
A. Wolfendale (Univ. of Durham), "The Origin of the Cosmic Radiation".
R. J. Protheroe (Univ. of Adelaide), "High Energy Cosmic Ray Acceleration Mechanisms".
E. C. Loh (Univ. of Utah), "High Energy Cosmic Ray Physics - Recent Results and Future Prospects".
J. Learned (Univ. of Hawaii), "Physics and Astronomy with Natural High Energy Neutrinos".
- 14:30 Tuesday, South Salon. (DNP) C2. INTERIM REPORT ON LONG RANGE PLAN FOR NUCLEAR PHYSICS, C. B. Dover, presiding.
- 20:00 Tuesday, North Salon. D1. WIGNER MEMORIAL SESSION, G. A. Snow, presiding.
H. Bethe (Cornell Univ.), "Wigner's Influence on my Physics".
A. Weinberg (ORNL), "Eugene Wigner - The First Nuclear Engineer".
W. Kohn (UC Santa Barbara), "Wigner and the Electron Theory of Metals".
E. Vogt (TRIUMF), "The Wigner Nucleus".

D. Gross (Princeton), "Symmetry and Physics - Wigner's Legacy".

9:00 Wednesday, South Salon.

(DNP/FBTG) E2. RECENT ADVANCES IN THE FEW NUCLEON SYSTEMS, R. Milner, presiding.

W. Glöckle (Univ. of Bochum), "The Three Nucleon Continuum: Achievements, Challenges, and Applications".

M. Viviani (Pisa Univ.), "Calculation of Bound and Scattering States for Four Nucleons".

A. Stadler (College of W&M), "Relativistic Calculations of the Three-Nucleon Bound State".

C. Jones (ANL), "Recent Experiments with Polarized Few-Nucleon Systems".

13:00 Wednesday, South Salon. (DNP) F2. PROBING NUCLEAR MATTER WITH HEAVY IONS: FROM LOW TO HIGH DENSITIES, P. D. Cottle, presiding.

K. W. Kemper (Florida State Univ.), "Surprisingly Large Spin Effects in Heavy-Ion Reactions".

T. Glasmacher (NSCL), "Multifragmentation of Hot Nuclear Systems".

P. G. Hansen (Aarhus Univ.), "The Neutron Halo Studied with Fast Radioactive Beams".

B. Cole (Columbia Univ.), "Strange Particle Production in Heavy-Ion Collisions at the AGS".

15:00-20:00 Wednesday. NSAC Meeting.

8:00 Thursday, South Salon. (DNP) I2. COSMOLOGY, HEAVY ION COLLIDERS, AND PHASES OF MATTER, J. Kapusta, presiding.

T. Schafer (SUNY at Stony Brook), "Instantons and the Chiral Phase Transition".

D. Toussaint (Univ. of Arizona), "Thermodynamics of Lattice QCD".

K. Geiger (CERN), "The Parton Cascade: A QCD Approach to Colliding Nuclei at Very High Energy".

T. Awes (ORNL), "Experimental Observations of Electromagnetic Probes of High Density Matter".

P. Arnold (Univ. of Washington), "The Electroweak and QCD Cosmological Phase Transitions".

11:00 Thursday, North Salon. (DNP/DPF) J1. MEMORIAL SESSION FOR JULIAN SCHWINGER, Y. J. Ng, presiding.

H. Feshbach (MIT), "The Early Days and Nuclear Physics".

L. S. Brown (Univ. of Washington), "An Important Schwinger Legacy: Theoretical Tools".

S. Glashow (Harvard Univ.), "The Road to Electroweak Unification".

K. A. Milton (Univ. of Oklahoma), "Source Theory and the UCLA Years: From Magnetic Charge to the Casimir Effect".

C. N. Yang (SUNY at Stony Brook), "Julian Schwinger".

14:30 Thursday, South Salon. (DNP) K2. BONNER PRIZE, NEUTRINO MASSES AND LIGHT QUARKS, J. Dubach, presiding.

F. Boehm (Cal Tech), "Long-Baseline Neutrino Oscillation Experiment at the San Onofre Reactor".

K. Lesko (LBL), "The Sudbury Neutrino Observatory".

Y. Qian (Univ. of Washington), "Supernova Nucleosynthesis and Neutrino Oscillations".

W. T. H. Van Oers (Univ. of Manitoba), "Charge Symmetry Breaking in np Elastic Scattering at 347 MeV".

16:54 Thursday, South Salon. BUSINESS MEETING OF THE DIVISION OF

NUCLEAR PHYSICS, following session
K2.

8:00 Friday, South Salon. (DNP/PMTG)

M2. PRECISION MEASUREMENTS
AND TESTS OF FUNDAMENTAL

LAWS IN BETA DECAY, G. Greene,
presiding.

M. S. Dewey (NIST), "The Neutron Lifetime
and Decay Correlations in Neutron
Decay"

J. Govaerts (Universite Catholique de
Louvain), "Precision Polarization
Measurements in Nuclear Beta-Decay".

B. Fujikawa (LBL), "Determination of the
Weak Vector Coupling Constant from
Superallowed Nuclear Beta Decays".

A. R. Young (Princeton), "New
Fundamental Symmetries
Measurements at Princeton with
Radioactive Nuclei".

11:00 Friday, South Salon. (DAMOP/DNP)

N2. TOPICS AT THE ATOMIC AND
NUCLEAR INTERFACE, S. Steadman,

presiding.

W. Happer (Princeton Univ.), "Spin
Exchange Optical Pumping of Rare
Gases and Hydrogen".

L. W. Anderson (Univ. of Wisconsin),
"Optically Pumped Polarized Ion
Sources".

S. J. Freedman (UC Berkeley), "Laser
Trapping of Radioactive Atoms".

D. E. Pritchard (MIT), "Precision Nuclear
Mass Measurements Using Ion Traps".