

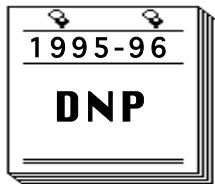
TO: Members of the Division of Nuclear Physics, APS
FROM: Virginia R. Brown, LLNL - Secretary-Treasurer, DNP

ACCOMPANYING THIS NEWSLETTER:

- Spring APS Meeting Invited Speaker Nomination Form
- Bethe Prize Donation Form

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

- A pre-registration form which includes workshops and banquet
- A housing form
- Invited Speakers
- Meeting Epitome
- Workshop Epitome
- Meeting-at-a-Glance
- A map



Future Deadlines

- **1 Sept. 1995** - Nominations for 1996 Bonner Prize (see item 6)
- **1 Sept. 1995** - Nominations for 1996 Dissertation Award in Nuclear Physics (see item 8)
- **15 Sept. 1995** - Last day for Bloomington "Special" Pre-

registration rates and last day for lodging reservations at the Bloomington meeting

- **6 Oct. 1995** - Invited Speaker Nomination Form for 1996 APS Spring Meeting (see item 3).
- **1 April 1996** - Nominations for APS Fellowship (see item 5).

WWW Home Page for DNP

A worldwide web home page for the Division of Nuclear Physics is currently available at "<http://nuclth.physics.wisc.edu/dnp/>". Each newsletter is posted on the web, well in advance of the copy you receive in the mail. Other information of interest to DNP members, such as deadlines for meetings, prizes, nomination forms, and special announcements are listed there as well. We have plans to post the DNP Brochure in the near future. We would like to hear your comments and suggestions. Please send them to Baha Balantekin at "dnp@nuclth.physics.wisc.edu".

1. RESULTS OF SPECIAL ELECTION FOR ADDITIONAL DNP COUNCILLOR AND SECRETARY-TREASURER

At the end of 1994, the DNP membership was 2,671, which was 6.41%

of the APS membership of 41,670. This is sufficient to elect a new DNP Councillor, who will begin a four-year term in January 1995, replacing Stephen E. Koonin.

By the deadline date, which was extended to 20 July 1995, 272 properly identified ballots were received for the "special election" of a second Division Councillor and a new Secretary-Treasurer. The counting of the ballots was supervised by H. Marshall Blann, Luisa F. Hansen and Ellen A. Sturmer, all of LLNL. John P. Schiffer (ANL) was elected Division Councillor to a four-year term beginning January 1996. He will replace Stephen E. Koonin, whose term expires December 1995. Peter Paul serves until December 1997.

Benjamin F. Gibson (LANL) was elected Secretary-Treasurer replacing Virginia R. Brown. His term will begin August 1995.

2. 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 six sessions of invited papers, one of which is the plenary session, and 22 sessions of contributed

papers. One invited session on "*Axial Current in Nuclear Systems*" has been organized by the Local Committee. Two other invited sessions will be on topics selected by the Program Committee at the recent Washington, D.C. APS meeting. One of these sessions is on "*Nucleon and Nuclear Structure with Electromagnetic Interactions*" and has been arranged by J. Dubach (Univ. of Massachusetts). The other session is on "*Towards the Superheavy Elements*" and has been arranged by T. L. Khoo (ANL). The remaining two invited sessions on "*Relativistic Heavy Ions and Weak Interactions*" and "*New Aspects of Nuclear Structure*" have been selected by the DNP Program Committee from nominations made by the DNP membership at large. Overhead projectors will be provided in each room; slide projectors will only be available for invited papers (if requested in advance).

Plenary Sessions

Since the 1995 long range planning activities will be completed by the Bloomington meeting, the plenary session at Bloomington will be along the lines of the Nuclear Physics Brochure on "*Basic Nuclear Science Serving Society*."

The Plenary Session is on "*Nuclear Physics - Basic Research Serving Society*". J. Dirk Walecka is the chair and the speakers and their titles are J. C. Browne (LANL), "Neutrons: Back to the Future with More Intensity", G. A. Norton (National Electrostatics Corp.), "Applications of Electrostatic Accelerators", and K. Ugurbil (Univ. of Minnesota), "Recent Developments in Magnetic Resonance Imaging".

Town Meeting

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

Workshops

There will be two workshops on 25 October prior to, but in conjunction with, the DNP meeting. One workshop is on "*Physics at the Transition...*". The second is 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 25 October at 07:30 - 09:30 and again at 17:00 - 21:00 hours. It will continue on 26 October from 08:00 - 17:00 hours.

The first workshop is on "*Physics at the Transition...*". The "transition" regime in the strong interactions spans energies from where a purely baryon and meson description is appropriate to where a perturbative description in terms of quarks and gluons emerges. The study of the interface between perturbative and non-perturbative QCD is active even at very high-energy facilities. A systematic exploration of the transition regime will be the specific mission of new and proposed electron and hadron accelerators (CEBAF, ELFE, COSY and LISS). Experiments at these facilities will provide crucial tests of QCD models of hadron structure and explore the interface between non-perturbative and perturbative QCD descriptions of hadron interactions. The purpose of this workshop is to elucidate the complementarity of the research programs at these electron and hadron facilities.

The second workshop on "*Graduate Education in Nuclear Physics; Changing Goals for Changing Times*" 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.

Registration

On-site registration for the meeting will begin on 25 October at 07:30 - 09:30 and again at 17:00 - 21:00 hours. It will continue on 26 October from 08:00 - 17:00 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.

Local Committee

Members of the Local Committee are J. Cameron (Chair), L. Bland, R. de Souza, K. Kwiatkowski, H. Meyer, H. Nann, C. Olmer, R. Pollock, M. Snow, J. Szymanski, V. Viola and B. Serot.

Users Group Meetings

The following User's Group Meetings have been scheduled for the Fall Meeting at Bloomington. In order to schedule other User's Group Meetings so as to prevent

conflicts with other activities and to have them announced in the Pocket Epitome, please notify the Local Organizing Committee as soon as possible.

19:30-20:30, Wednesday, 25 October - The **CEBAF** User's Group will be held in the Georgian Room.

16:30-17:30, Thursday, 26 October - The **88-Inch Cyclotron** User's Group will be held in the Persimmon Room. The **ATLAS** User's Group will be held in the Sassafras Room. The **NSCL** User's Group will be held in the Maple Room.

17:30-18:30, Thursday, 26 October - The **Gammasphere** User's Group will be held in the Persimmon Room. The **RHIC/AGS** User's Group will be held in the Oak Room. The **BATES** User's Group will be held in the Sassafras Room.

18:00-19:00, Friday, 27 October - The **HRIBF/HOLIFIELD** User's Group will be held in the Oak Room.

Opera

A limited number of seats are available for the Indiana University School of Music's production of "Rigoletto" on Saturday, 28 October, at 8:00 p.m. in the Musical Arts Center. Non-subscription ticket sales begin 11 September; ticket prices range from \$12 to \$20. Tickets may be reserved by contacting Sharon Herzel at the address given below.

Meeting Information

For further information, please contact Ms. Sharon Herzel, 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".

3. SPRING APS MEETING AT INDIANAPOLIS, IN, 2-5 MAY 1996

The 1996 APS Spring Meeting will be held in Indianapolis, IN, 2-5 May. The Division of Nuclear Physics will organize five sessions of invited papers for the Spring meeting. The 1995 Program Committee will arrange two or three sessions of invited papers on topics selected at their 24 October Bloomington meeting. Suggestions for topics are welcome and should be sent with reasons for their choice to the 1995 Program Committee Chair, Lee L. Riedinger. Additional information such as proposed talks with names of possible speakers for your proposed "topical" sessions would also be useful. The remaining sessions are selected by vote of the Program Committee from suggestions for individual speakers from the DNP membership. The composition of the "voted" sessions relies on the nominations from the entire DNP community; you are urged to participate in this process. The nomination form for individual speakers, which is included with this newsletter, should be mailed to Lee L. Riedinger as early as possible before the **6 October** deadline. **NOTE: This deadline is earlier than usual and before the Fall Meeting at Bloomington, IN.**

In addition to its usual five sessions at the Spring Meeting, the DNP will organize six joint sessions with other APS subunits. The six APS subunits are the Division of Particles and Fields, the Division of Beam Physics, the Division of Astrophysics, the Few Body Topical Group, the Precision Measurement and Fundamental Constants Topical Group, and the Division of Computational Physics. If you have suggestions for these joint sessions, please contact members of the sub-committees or Lee L. Riedinger.

4. 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	Whistler, B.C.

1998	October	Santa Fe, NM
1999	October	Asilomar, CA

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

5. NOMINATIONS FOR APS FELLOWSHIP

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

The DNP deadline is normally *1 April*. Nomination forms are available from Peggye Mendoza, The American Physical Society, One Physics Ellipse, College Park, MD 20740-3843. Completed forms should be returned to Dr. J. Franz at the same address.

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

complete publication list is highly recommended.

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

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

The 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.

6. 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, R. 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: Donald F. Geesaman, Building 203, Physics Department, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, IL 60439.

7. APS BETHE PRIZE, W. HAXTON AND E. HENLEY

The DNP has joined with the Division of Astrophysics in an effort to create a new APS prize in honor of Hans Bethe. The goal is to raise the necessary \$100,000 within the next year, so that the prize can be self-sustaining.

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' interests, and will be awarded for outstanding work in either of these fields.

We are asking each member of the two Divisions to consider supporting this effort. The committee has set \$25,000 as the goal for individual contributions. You will find enclosed in this newsletter a donation form that can be mailed to the DNP Secretary/Treasurer, Benjamin F. Gibson. We believe the broader the support for this effort, the more meaning the prize will have for Hans and for our community. Thank you for your help.

8. 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 any contributions from 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 Professor J. D. Walecka, CEBAF, 12000 Jefferson Avenue, Room C210, Newport News, VA 23606. The other committee members are C. B. Dover, E. V. Hungerford, J. Kolata, and J. Rapaport.

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

There has been considerable progress on the funding bills for nuclear science in the Department of Energy and the National Science Foundation. Both appropriations bills have passed the full committee in the House, and deliberations are proceeding in the Senate. In addition, the House Science committee has passed the authorization bill for each.

The Energy and Water Appropriations bill (H.R. 1905) for the Department of Energy was approved by the House of Representatives on July 12 (see American Institute of Physics FYI #100 - <http://www.aip.org/>). Also, on July 25

the Senate Energy and Water Appropriations Subcommittee drafted the numbers listed below (in millions).

	FY1995 Approp.	FY1996 Request	House Bill	Senate Subcomm.
Fusion	\$368.4M	366.1	229.1	225.1
Basic Energy Sciences	733.9	811.5	792.7	791.6
High Energy Physics	642.1	685.6	677.0	657.0
Nuclear Physics	331.5	321.1	304.5	304.5

The proposed decrease for Nuclear Physics would have a substantial impact on our field. Most of the decrease is accounted for by the closing of the nuclear physics operations at LAMPF, but these operating funds are desperately needed elsewhere, as CEBAF is now operational and RHIC will operate not far down the road. This decrease could have been even larger, as the House authorization committee (House Science) had a recommendation of \$290.1M as the subcommittee mark (subcommittee chaired by Representative Rohrabacher), with language to remove funding for the five DOE-supported accelerator facilities at universities. However, on June 23 the full House Science committee (chaired by Robert Walker) raised the level back to the request (\$321M) in H.R. 1816. Of course, this is the authorization bill, and in the end it is the appropriations bill that matters most. In the Senate subcommittee action, RHIC construction was decreased by \$5M to \$65M for FY96.

On July 16 the House Appropriations committee passed the appropriations bill (H.R. 2099) on VA, HUD and Independent Agencies (see FYI #97 and 101). This includes \$3160M for the National Science Foundation, down by \$103M compared to the FY95 level and by \$200M from the administration request. Research and Related Activities would receive \$2254M, down \$26M from FY95 and \$200M from the request. This is a real blow to the foundation, and the funding level recommended in the authorization bill (H.R. 1852) is even lower, \$3126M total and \$2226M for Research and Related Activities (FYI #91).

Work on these bills is proceeding in the subcommittees of Senate Appropriations. After the Senate passes their appropriations bills, then conference committees will meet to resolve the differences and write final bills to be approved by both chambers.

The long term prognosis for support of basic science is addressed in general terms in the recently passed budget resolution, which gives the broad blueprint for funding over the next seven years. The budget resolution calls for a savings of \$190B over that period in non-defense discretionary spending compared to current levels of funding. The goal is to achieve a balanced budget by the year 2002. As calculated by the AAAS and quoted in FYI #93, such a plan could result in a decline in NSF funding by 18% in 2002 compared to the current level adjusted by inflation. Of course it will be the actual annual appropriations that determine whether this plan is followed.

10. DNP ad hoc COMMITTEE ON EDUCATION, P. COTTLE (CHAIR)

One of the projects being pursued by the DNP ad hoc Committee on Education is a World Wide Web home page that can be used by students at the middle school and high school levels who want to learn about nuclear science. Jim Carr, a Research Scientist at the Supercomputer Computations Research Institute at Florida State University, is making progress on this project. He has set up a prototype homepage at <http://www.scri.fsu.edu/~jac/Nuclear/>.

This homepage is still under development, and Jim is quite interested in receiving comments and suggestions. In particular, Jim would like to know what questions about nuclear physics people accessing the homepage might have that it should answer, and what other resources appropriate for middle and high school students might be available for linking to this homepage. If you have suggestions or

comments, please send them to Jim at "jac@scri.fsu.edu".

11. FEW-BODY SYSTEMS ELECTRONIC, W. PLESSAS

FEW-BODY SYSTEMS *Electronic* has been launched on the Internet. The DNP community is invited to try out the performance of the new electronic journal coming along with an advanced networked hypermedia system (Hyper-G).

In order to take full advantage of FEW-BODY SYSTEMS *Electronic* you must install a Hyper-G client on your own computer. Hyper-G clients are presently available for UNIX/X11 and PC/Windows. These are called "Harmony" and "Amadeus", respectively. Soon there will also be a client for Macintosh. You can get the appropriate Hyper-G client for free from directory /pub/Hyper-G via anonymous ftp to [iicm.tu-graz.ac.at](ftp://iicm.tu-graz.ac.at). Installation instructions are obtainable from there too.

In addition, APS/DNP members are reminded that they may get an individual half-priced subscription to the journal.

12. ANNUAL REVIEWS OF NUCLEAR AND PARTICLE SCIENCE

The Division has continued the agreement with Annual Reviews, Inc., which will enable DNP members to obtain copies of the "*Annual Review of Nuclear and Particle Science*" at a 30% discount when purchased through the DNP Secretary-Treasurer, Benjamin F. Gibson, Los Alamos National Laboratory, DNP, MS-283, Los Alamos, NM 87545.

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.*

13. FUTURE CONFERENCES

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

"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@vxihep.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 Institute 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 Institute 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"].

"XIX Nuclear Physics Symposium at Oaxtepec", 3-6 January 1996, to be held in Oaxtepec, Mexico. [For further information contact: Roelof Bijker, Instituto de Ciencias Nucleares UNAM, A. P. 70-543, 04510 Mexico DF, Mexico, fax: (525) 616-2233, email: "bijker@roxanne.nuclecu.unam.mx"].

"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"].

"1996 Gordon Research Conference on Nuclear Chemistry", 16-21 June 1996, to be held in New London, New Hampshire, USA. [For further information contact: W. Trautmann, GSI Darmstadt, Postfach 110552, D-64220, Darmstadt, Germany, phone: +49-6151-359 2774, fax: +49-6151-359 2989, e-mail: "traut@vsbz.gsi.de"].

"1996 Gordon Research Conference on Photonuclear Reactions", 28 July - 2

August 1996, to be held in Tilton, New Hampshire. [For further information contact: Alan M. Nathan, University of Illinois, Department of Physics, 1110 Green Street, Urbana, IL 61801, phone: 217-333-0965, fax: 217-333-1215, e-mail: "a-nathan@uiuc.edu"].

"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"].

**INVITED SPEAKERS OF THE DNP
FALL MEETING
BLOOMINGTON, IN
25-28 OCTOBER 1995**

The meeting includes six invited sessions, one of which is a plenary session. The plenary session is in Alumni Hall. All other invited sessions are in the Frangipani Room.

**26 October
9:00 Thursday Morning**

**PA Nuclear Physics - Basic Research
Serving Society, J. D. Walecka,
presiding.**

- J. C. Browne (LANL), "Neutrons: Back to the Future with More Intensity".
G. A. Norton (National Electrostatics Corp.), "Applications of Electrostatic Accelerators".
K. Ugurbil (Univ. of Minnesota), "Recent Developments in Magnetic Resonance Imaging".

13:30 Thursday Afternoon

**AA Axial Current in Nuclear Systems,
T. S. Lee, presiding.**

- J. A. Niskanen (Univ. of Helsinki), "Axial Exchange Charge in Pion Production and Absorption".
K. Kubodera (Univ. of South Carolina), "Axial Exchange Charge in Semi-Leptonic Processes".
T. P. Gorringe (Univ. of Kentucky), "The Weak Pseudoscalar Coupling of the Free and the Bound Proton".
H. O. Meyer (Indiana Univ. Cyclotron Facility), "Heavy Meson Exchange in Pion Production and Absorption".

**27 October
9:00 Friday Morning**

**BA Nucleon and Nuclear Structure with
Electromagnetic Interactions, J.
Dubach, presiding.**

- S. P. Van Verst (MIT), "Experiments with the Focal Plane Polarimeter at Bates".
E. Offerman (CEBAF), "Probing High Initial Proton Momenta in lp-shell Nuclei: Recent Results from MAMI".
C. W. de Jager (NIKHEF), "The Internal Target Program at NIKHEF".
G. Feldman (Saskatchewan), "Nucleon Polarizability".

13:30 Friday Afternoon

**CA Towards the Superheavy Elements,
T. L. Khoo, presiding.**

- P. Armbruster (GSI), "The Synthesis of the Deformed Superheavy Elements 107 to 111".
Y. T. Oganessian (Joint Institute for Nuclear Research), "Heavy - Element Research at FLNR (JINR)".

- P. Möller (LANL), "Predictions on the Stability and Production of Superheavy Elements".
- K. E. Rehm (ANL), "Nuclear Structure Effects in Sub-Barrier Fusion Reactions".

28 October

9:00 Saturday Morning

DA Relativistic Heavy Ions and Weak Interactions, B. V. Jacak, presiding.

- G. Rai (LBL), "Latest Results from the EOS Collaboration".
- J. P. Wessels (SUNY at Stony Brook), "Dynamics of Compression and Expansion in Au on Au Collisions at the AGS".
- L. S. Kisslinger (Carnegie Mellon Univ.), "The Weak Parity-Violating Pion Nucleon Coupling: Why It Is Weaker Than Weak".
- C. R. Gould (North Carolina State Univ.), "New Test of P-Even Time Reversal Invariance in Neutron Transmission".

13:30 Saturday Afternoon

EA New Aspects of Nuclear Structure, J. A. Becker, presiding.

- A. Wuosmaa (ANL), "Recent Results on Electron-Positron Production in Heavy Ion Collisions".
- J. Janecke (Univ. of Michigan), "Isovector Giant Resonances in Nuclei from ($^3\text{He},t$), ($t,^3\text{He}$), and ($^7\text{Li},^7\text{Be}$) Charge-Exchange Reactions".
- I. Y. Lee (LBL), "Structure of Neutron Rich Nuclei".
- J. H. Hamilton (Vanderbilt Univ.), "New Insights from Studies of Spontaneous Fission: Yields and Neutron Multiplicities, Cold Fission, and Structure of Neutron-Rich Nuclei".

**EPITOME OF THE DNP FALL MEETING
BLOOMINGTON, IN
25-28 OCTOBER 1995**

Chairpersons are in parentheses. Names without initials indicate invited speakers. All rooms are at the Indiana University Memorial Union. The plenary session and town meeting are in Alumni Hall. The invited sessions are in the Frangipani Room, and the contributed sessions are in the Oak, Walnut, Maple, Persimmon and Sassafras Rooms.

Registration

On-site registration for the meeting will take place in the East Lounge. Registration times are as follows:

- Wednesday, 25 October
07:30 - 09:30
- Wednesday, 25 October
17:00 - 21:00
- Thursday, 26 October
08:00 - 17:00

25 October

8:15 Wednesday Morning

Workshop A: Physics at the Transition...
Bland, Laget, Peng, Close, Dzierba (Nagamiya) Georgian Room.

8:20 Wednesday Morning

Workshop B: Graduate Education in Nuclear Physics: Changing Goals for Changing Times. (Szymanski) Whittenberger Auditorium.

12:05 Wednesday Afternoon



Workshop B: Graduate Education in Nuclear Physics: Changing Goals for Changing Times. (Discussion Groups from 12:05 to 13:30. See detailed program below.)

13:30 Wednesday Afternoon

Workshop A: Physics at the Transition...
Ji, Qiu, Geesaman, Eversheim, Guichon
(McKeown) Georgian Room.

Workshop B: Graduate Education in Nuclear Physics: Changing Goals for Changing Times. (Olmer) Whittenberger Auditorium.

19:30 Wednesday Evening

19:30-20:30 CEBAF User's Group,
Georgian Room.

26 October

9:00 Thursday Morning

PA Nuclear Physics - Basic Research Serving Society. Browne, Norton, Ugurbil (J. D. Walecka) Alumni Hall.

13:30 Thursday Afternoon

AA Axial Current in Nuclear Systems.
Niskanen, Kubodera, Goringe, Meyer
(T. S. Lee) Frangipani Room.

AB Heavy Ions I: Fragmentation. (B. Lynch) Oak Room.

AC Instrumentation I: Detectors and Facilities. (A. Hirsch) Walnut Room.

AD Weak Interactions; Radioactive Beams. (J. Kolata) Maple Room.

AE Nuclear Theory: QCD, Nuclear Matter. (D. Furnstahl) Persimmon Room.

AF Nuclear Structure I: $A < 100$ and Giant Resonances. (P. Chowdhury) Sassafras Room.

Thursday Evening

16:00-17:30 Buses Leaving for Reception Tours of IUCF.

17:00-19:00 Buses Returning from Reception Tours of IUCF.

16:30-17:30 88-Inch Cyclotron User's Group,
Persimmon Room.

16:30-17:30 ATLAS User's Group,
Sassafras Room.

16:30-17:30 NSCL User's Group, Maple Room.

17:30-18:30 Gammasphere User's Group,
Persimmon Room.

17:30-18:30 RHIC/AGS User's Group,
Oak Room.

17:30-18:30 BATES User's Group,
Sassafras Room.

27 October

9:00 Friday Morning

BA Nucleon and Nuclear Structure with Electromagnetic Interactions. Van Verst, Offerman, de Jager, Feldman (J. Dubach) Frangipani Room.

BB Heavy Ions II: Ultra-Relativistic and EOS. (W. Bauer) Oak Room.

BC Nuclear Astrophysics I. (M. Wiescher) Walnut Room.

BD Few Nuclear Reactions. (C. Howell) Maple Room.

BE Nucleon Induced and Charge Exchange Reactions at Low Energies.
(L. Hansen) Persimmon Room.

BF Nuclear Structure II: $100 \leq A < 150$. (C. J. Lister) Sassafras Room.

13:30 Friday Afternoon

CA Towards the Superheavy Elements.
Armbruster, Oganessian, Möller, Rehm (T. L. Khoo) Frangipani Room.

CB Heavy Ions III: Low and Intermediate Energy. (G. Wozniak) Oak Room.

CC Instrumentation II: Methods. (F. P. Brady) Walnut Room.

CD Nucleon Induced and Charge Exchange Reactions at Intermediate Energies.
(S. M. Grimes) Maple Room.

CE Lepton- and Photon-Induced Reactions. (J. Matthews) Persimmon Room.

CF Nuclear Structure III: $150 \leq A < 190$. (M. Agnes-Stephens) Sassafras Room.

16:00-17:30 Friday Afternoon

PB Town Meeting, Alumni Hall.

Friday Evening

18:00-19:00 HRIBF/HOLIFIELD User's Group, Oak Room.

18:30-19:30 Reception, Solarium.

19:30-21:30 Banquet, Alumni Hall.

**28 October
9:00 Saturday Morning**

DA Relativistic Heavy Ions and Weak Interactions. Rai, Wessels, Kisslinger, Gould (B. V. Jacak) Frangipani Room.

DB Nuclear Astrophysics II. (G. Mathews) Walnut Room.

DC Pion and Few-Nucleon Physics. (W. Tornow) Maple Room.

DD Nuclear Structure IV: $150 \leq A < 190$. (J. Cizewski) Sassafras Room.

13:30 Saturday Afternoon

EA New Aspects of Nuclear Structure.
Wuosmaa, Janecke, Lee, Hamilton (J. A. Becker) Frangipani Room.

EB Heavy Ions IV: Nucleon-Nucleon Correlations and Intermediate Energy. (T. C. Sangster) Oak Room.

EC Symmetries; NN Scattering. (S. Vigdor) Maple Room.

ED Theory. (G. Rawitscher) Persimmon Room.

EE Nuclear Structure V: $A \geq 190$. (P. Fallon) Sassafras Room.

**TOPICS AND SPEAKERS FOR THE WORKSHOPS
TO BE HELD 25 OCTOBER 1995
IN CONJUNCTION WITH THE DNP
FALL MEETING**

WORKSHOP A

**PHYSICS AT THE TRANSITION...
25 October 1995**

**Indiana University Memorial Union:
Georgian Room
Organizers: L.C. Bland, S. Gardner and
Local Committee**

The "transition" regime in the strong interactions spans energies from where a purely baryon and meson description is appropriate to where a perturbative description in terms of quarks and gluons emerges. The study of the interface between perturbative and non-perturbative QCD is active even at very high-energy facilities. A systematic exploration of the transition regime will be the specific mission of new and proposed electron and hadron accelerators (CEBAF, ELFE, COSY and LISS). Experiments at these facilities will provide crucial tests of QCD models of hadron structure and explore the interface between non-perturbative and perturbative QCD descriptions of hadron interactions. The purpose of this workshop is to elucidate the complementarity of the research programs at these electron and hadron facilities.

SESSION 1

Chair: S. Nagamiya, Columbia University

8:15 - WA1 Physics Near the Strange and Charm Production Thresholds, L.C. Bland (IUCF)

8:45 - WA2 Strangeness Production with Photons and Hadrons, J.M. Laget (Saclay)

9:30 - WA3 Flavor Dependence of the Quark Sea in Nucleons and Nuclei, J.C. Peng (LANL)

10:15 - Break

10:35 - WA4 Charmed Hybrid Mesons, F. Close (Rutherford Appleton Lab.) — to be confirmed

11:20 - WA5 The Search for QCD Exotica, A. Dzierba (Indiana)

12:05 - Lunch

SESSION 2

Chair: R.D. McKeown, Cal. Tech.

13:30 - WA6 Spin Physics at RHIC, X. Ji (MIT)

14:15 - WA7 Single Transverse-Spin Asymmetries in Hadronic Collisions, J. Qiu (Iowa State)

15:00 - WA8 In Search of Color Transparency, D. Geesaman (ANL)

15:45 - Break

16:05 - WA9 Experimental Searches for Parity- and Time-Reversal Violations Between Hadrons, D. Eversheim (Bonn)

16:50 - WA10 Virtual Compton Scattering, P.A.M. Guichon (Saclay)

WORKSHOP B

GRADUATE EDUCATION IN NUCLEAR PHYSICS: CHANGING GOALS FOR CHANGING TIMES

Wednesday, 25 October 1995

The plenary sessions will meet in Whittenberger Auditorium

Discussion groups will meet in rooms designated below.

Organizers: J. J. Szymanski, C. Olmer and Local Committee

It is clear that the environment in which nuclear physicists have been working is changing. This fact leads one to consider the changing role of nuclear physicists in our society, and, of particular interest to this workshop, how the education of graduate students can be changed to meet new needs. Ample opportunities will be provided at this workshop for physicists from all environments (e.g. small colleges, large research universities, industry, government) to discuss ways in which physics graduate education should be changed in order

to better prepare our graduate students for the variety of workplaces that they will encounter.

SESSION 1

Chair: J. J. Szymanski, IUCF

8:20 - Welcome, Organization of the Workshop

8:30 - WB1 Agency Perspective on Graduate Training in Science and Engineering
Given by a representative of the National Science Foundation

9:15 - WB2 Panel Discussion: View from the World at Large

Dr. Judy Franz, APS, moderator
Panelists include:

- Mr. Brian Bunker, University of Illinois
The View from a Graduate Student Organization
- Prof. Michael Cherney, Creighton University
The View from a Teaching-Oriented Institution
- Prof. Paul Deluca, University of Wisconsin
The View from a Medical Physics Group
- Prof. Robert Redwine, MIT
The View from a Research University; Study of Physics Graduate Education and Employment by the Nuclear Physics Long-Range Planning Committee
- Dr. Matt Richter, Hypervision Inc.
Other panelists to be confirmed
The View from an Industrial Setting

10:00 - Break

10:20 - WB3 Panel Discussion: View from the World at Large (continued)

12:05 - Formation of Discussion Groups

12:20 - WB4 Discussion Groups (lunch provided)

- Alternate Minors and Expanding Experiences (Oak Room)
- Matching Training with Employment Opportunities (Maple Room)
- Where are the Jobs? - Networking (Sassafras Room)
- Role of Funding Agencies in Making It Work (Persimmon Room)
- Training in Teaching - How Much?, What Type? (Dogwood Room)

SESSION 2

Chair: C. Olmer, IUCF

13:30 - WB5 Reflections and Implementation of the Report by the Committee on Science and Engineering and Public Policy
Prof. George Walker, Vice President for Research and Dean of the Graduate School, Indiana University

14:15 - WB6 Continuation of Discussion Groups (same room assignments as session WB4)

15:30 - Break

15:40 - WB7 Reports from Discussion Groups

16:30 - WB8 Open Discussion, lead by a Panel made up of the Speakers and Discussion Group Leaders

**17:45 - End of Formal Program
Reception for Workshop
Participants**