

DNP



NEWSLETTER NO. 86
May 1991

TO: MEMBERS OF THE DIVISION OF NUCLEAR PHYSICS, APS
FROM: VIRGINIA R. BROWN, LLNL, SECRETARY-TREASURER, DNP

ACCOMPANYING THIS NEWSLETTER :

**A Ballot for the Election of an Additional DNP
Division Councillor**

**A Ballot for the Nomination of DNP Officers and
Executive Committee.**

24-26 October DNP Meeting, East Lansing, MI

- A double-sided pre-registration form which includes workshops, banquet and housing.
- See item 5 for meeting information.

FUTURE DEADLINES



- **21 June 1991**- Contributed and Invited Abstracts for the East Lansing, Michigan Fall Meeting (See item 5).
- **1 July 1991** - User Group Fall Meeting Room Requests for Bulletin (See item 6).
- **12 July 1991** - Election Ballots for DNP Divisional Councillor (See item 2).
- **12 July 1991** - Nomination Ballots for DNP Elections (See item 3).
- **1 Sept. 1991**-Nominations for 1992 Dissertation Award (See item 9).
- **1 Sept. 1991**-Nominations for 1992 Bonner Prize (See item 10).
- **1 April 1992** - Nominations for APS Fellowship (See item 8).

1. COMMITTEES OF THE DNP FOR 1991

Executive Committee

Gerard M. Crawley, Michigan State Univ., Chair (1992)
Wick C. Haxton, Univ. of Wash., Vice-Chair (1992)

Virginia R. Brown, LLNL, Secretary-Treasurer (1992)
Gerald T. Garvey, LANL, Division Councillor, (1993)
James B. Ball, ORNL, Past Chair (1992)
John Cameron, Indiana Univ. (1992)
Richard F. Casten, BNL (1993)
Stuart J. Freedman, Argonne (1993)
Noemie Benczer-Koller, Rutgers University (1992)
Peter D. Parker, Yale Univ. (1992)
Leo L. Riedinger, Jr., Univ. of Tenn. (1993)

Program Committee

Wick C. Haxton, Univ. of Washington, Chair
James B. Ball, ORNL, (Past Chair, 1989)
Gerard Crawley, Mich. St. Univ., (Past Chair, 1990)
Virginia R. Brown, LLNL
Arthur E. Champagne, Univ. of N. Carolina-Chapel
Jolie A. Cizewski, Rutgers Univ.
Jerry D. Garrett, ORNL
Donald F. Geesaman, Argonne
Benjamin F. Gibson, LANL
Joseph N. Ginocchio, LANL
Cynthia Gossett, Univ. of Wash.
Bernhard A. Mecking, CEBAF
Berndt Müller, Duke Univ.
Brian D. Serot, Indiana Univ.
Philip J. Siemens, Oregon State Univ.
Johanna Stachel, SUNY
Paul Stoler, Rensselaer
James P. Vary, Iowa State Univ.
Jochen K. Wambach, Univ. of Ill.
Gordon J. Wozniak, LBL

Nominating Committee

R. G. Stokstad, LBL, Chair
G. T. Garvey, LANL
J. L. Mathews, MIT
G. R. Young, ORNL

1991 Fellowship Committee

R. A. Eisenstein, Univ. of Ill., Chair,
F. E. Bertrand, Jr., ORNL
H. E. Jackson, Argonne

1992 Fellowship Committee

J. B. Ball, ORNL, Chair,
E. G. Adelberger, Univ. of Wash.
F. E. Bertrand, Jr., ORNL
E. J. Moniz, MIT

1992 Bonner Prize Committee

H. C. Britt, LLNL, Chair
V. W. Hughes, Yale
D. W. Miller, Indiana Univ.
R. J. Perry, Ohio State, V. Chair,
F. S. Stephens, LBL

1993 Bonner Prize Committee

R. J. Perry, Ohio State, Chair,
B. Balantekin, Univ. of Wisconsin, V. Chair
J. A. Cizewski, Rutgers
F. S. Stephens, LBL
P. Twin, Liverpool

1992 Dissertation Award Committee

G. M. Crawley, MSU, Chair,
J. B. Ball, ORNL
B. R. Holstein, Univ. of Mass.
A. M. Nathan, Univ. of Ill.
E. V. Hungerford, Univ. of Houston

Nuclear Science Resources Committee

L. L. Riedinger, Jr., ORNL, Chair
J. G. Cramer, Jr., Univ. of Wash.
G. M. Crawley, Mich. State Univ.
J. Finck, Central Michigan Univ.
L. S. Schroeder, LBL

Physics News Committee

W. C. Haxton, Univ. of Wash., Chair
A. B. McDonald, Queens Univ.
S. Nagamiya, Columbia Univ.
R. P. Redwine, MIT
S. E. Vigdor, IUCF

Appointments of members to DNP committees are for one-year terms. The Division Councillor is elected for a four-year term.

2. SPECIAL ELECTION FOR ADDITIONAL DNP COUNCILLOR AND DNP MEMBERSHIP.

Under the new APS Constitution and Bylaws based on the size of its membership, the Division of Nuclear Physics is allowed an additional Division Councillor to begin a four year term in January 1992. The candidates selected by the Nominating Committee are Steven E. Koonin and John P. Schiffer. The candidates biographies follow and the ballot is enclosed. The Nominating Committee consisted of R. E. Tribble (Chair), P. D. Barnes, G. T. Garvey, and J. A. Harvey.

The enclosed election ballot must be signed and may be returned in the enclosed envelope with your name and address printed or signed legibly in the upper left hand corner of the envelope. It must be received by *Virginia R. Brown* on or before **12 July 1991**, in order to be counted.

The size of the DNP membership is a significant factor in how well the DNP can represent the interests of the nuclear physics community. A recent example was the role of the DNP in organizing "town meetings" for input from the community into the "Long Range Plan" for nuclear physics, provided by NSAC and requested by the DOE and NSF. The interests of the nuclear physics community are also represented by the DNP in the APS. The new APS Constitution and Bylaws state that the number of Division Councillors will be two if the subunit membership is 6% above the APS membership. The DNP membership has slipped below this %, but because of a grandfather clause, we will still get an additional Councillor. In order to maintain this representation for the future, it will be necessary to increase the DNP membership.

The DNP membership is falling below about 3/4 of its size before the implementation of the \$5 DNP membership dues. You may want to encourage your graduate students and colleagues to join, or you may want to reinstate your own DNP membership. To do so, indicate this on your recent APS invoice and add \$5 to your bill or get in touch with the membership department at the New York APS office.

Candidate Biographies

STEVEN E. KOONIN--Assistant Professor of Theoretical Physics, California Institute of Technology 7/1/75--6/30/78; Associate Professor of Physics 7/1/78-6/30/81; Professor of Theoretical Physics 7/1/81-- ; Chairman of the Faculty 7/1/89-6/30/91; American Physical Society (Fellow); American Association for the Advancement of Science (Fellow); APS Div. of Nuclear Phys. Program Comm., 1978--80; LBL Bevalac Program Advisory Committee, 1979--82; ORNL Physics Division Visiting Committee, 1979--83; APS Division of Nuclear Physics Committee for Contacts with the Press, 1980--1982; APS Div. of Nucl. Phys. Executive Committee, 1981--83;

NUSAC Subcommittee for Heavy-Ion Facilities, 1981; NUSAC Subcommittee for Computational Needs of Nuclear Theory, 1981; SURA Scientific Advisory Panel, 1981--82; UC Berkeley Physics Dept. Special Vis. Comm., 1981; DOE Nuclear Theory Review, 1981; Senior Referee, Physical Review Letters, 1981; MSU Cyclotron Program Advisory Committee, 1982--86; DOE Heavy-Ion Users Review, 1982; Coordinator, Nuclear Theory Program, Inst. for Theoretical Physics, Santa Barbara, 1982; Associate Editor, Nuclear Physics A, 1982--; Editorial Board, Physical Review C, 1983--86; NUSAC Panel on Electron Accelerator Facilities, 1983; NUSAC Long-Range Plan Working Group, 1983; National Academy of Sciences, Physics Survey Subpanel on Nuclear Physics, 1983--84; BNL Physics and Accelerator Div. Adv. Comm., 1983--85; Vice-Chairman, Nuclear Structure Gordon Conference, 1983; Chairman, Nuclear Structure Gordon Conference, 1984; ANL Physics Division Advisory Committee., 1984--87; NUSAC Subcommittee on the Scientific Justification for a 4 GeV CW Electron Accelerator, 1984; NUSAC ad hoc Subcommittee for Computing, 1984; APS Bonner Prize Committee, 1985 (Chairman, 1986); NSF Physics Division Advisory Committee, 1985--88; Indiana University Cyclotron Facility Program Advisory Committee, 1985--89; Associated Universities, Inc. Board of Trustees, 1985--88; Advisory Board, NSF Institute for Theoretical Physics, Santa Barbara, 1986--90 (Chairman, 1988); Steering Committee, Maryland University Project on Physics and Educational Technology, 1986; Allocation Committee, San Diego Supercomputer Center, 1986; Institute for Defense Analysis, Defense Sciences Study Group, 1986--88; Committee of Examiners for the Graduate Record Exam, Educational Testing Service, 1986--1989; NUSAC Subcommittee for Nuclear Theory (Chairman), 1987; Nominating Committee, Physics Section, AAAS, 1987--88; Chairman of the Division of Nuclear Physics, APS, 1988--89 (Vice-Chairman, 1987--88); Steering Committee, APS Topical Group in Computational Physics, 1987--90; USC Physics Review, 1988; SLAC Nuclear Physics Program Advisory Committee, 1988--; Editorial Committee, Annual Review of Nuclear and Particle Science 1989--; DOE Advisory Panel on Cold Fusion, 1989; NAS Second Review of Inertial Confinement Fusion, Chairman, 1989--90; Editorial Board, International Journal of Modern Physics C, 1989--; DOE Institute for Nuclear Theory Advisory Committee (Chairman, 1990--); NAS Panel on Basic Nuclear Data Compilation, 1989--90; MIT Physics Visiting Committee, 1989--; DOE/NSF Nuclear Science Advisory Committee, 1990--; NRC Board on Physics and Astronomy, 1990--; Editorial Council, Annals of Physics, 1990--.

JOHN P. SCHIFFER -- Senior Scientist Argonne Nat'l. Lab.; Professor of Physics, University of Chicago; Ph.D. Yale University (1954); A.B. Oberlin College (1951). Sabbaticals: Harwell, England, (1959-60); Princeton (1964); Rochester (1967-68); TU Munich (1973-74). Honors: Guggenheim Fellowship (1959); Humboldt Award (1973); Bonner Prize (APS) (1976); Wilbur Cross Medal (Yale) (1985); National Academy of Sciences (1987). Editorial: Editor, Comments on Nucl. and Part. Phys. (1971-75); Assoc. Ed. Reviews of Mod. Physics (1972-77), Ad Hoc Advisory Comm. on Phys. Rev. Lett. (1972); Editor, Physics Letters B (1978-); Ed. Board, Phys. Rev. C (1983-85); Ed. Comm., Ann. Rev. Nucl. Sci. (1987-). APS: Nominating Comm. (1976 & 90-); Publications Comm. (1986-90); Bonner Prize Comm. (1973 & 1976; Chairman, 1980); Panel on Journal Problems and Policy (1976); Chairman, Search Comm. for Phys. Rev. C Editor (1986); APS-DNP: Executive Committee (1972 -77); Vice Chairman (1974-75); Chairman, (1975-76); Data compilation Comm. (1974); Program Comm. (1973-75); Nominat. Comm. (1985). AAAS: Council (1989-); Chair-Elect, Section B (1991). DOE/NSF: Nuclear Science Advisory Comm. (1981-85), Chairman (1983-85); Advisory Board, Nuclear Data (1970-78); ERAB Physics Review Panel (1986); ERAB Cold Fusion Panel (1989); NSF Physics Adv. Panel (1971-73). Program Advisory Committees: LAMPF (1971-73); IUCF (1974-77); BEVALAC (1978-80); SIN (1980-84); BATES (1984-87); ATLAS (1983-); GSI (87-88); CEBAF (1986-91). Interests: Experimental nuclear physics, nuclear structure, heavy ion reactions, nuclear physics with electromagnetic interactions, non-nucleonic effects in nuclei, cold beams in storage rings.

3. NOMINATION OF OFFICERS AND EXECUTIVE COMMITTEE FOR 1992

The terms of the officers and three members of the present Executive Committee will expire at the close of the regular meeting of the Division to be held in conjunction with the APS general meeting in Washington, D.C., 20-23 April 1992. Wick C. Haxton will become Chairman and Richard F. Casten, Stuart J. Freedman, and Leo L. Riedinger, Jr. will remain members of the Executive Committee. A Vice-Chairman, Secretary-Treasurer, and three members of the Executive Committee are to be elected before April 1992. The enclosed nominating ballot must be signed and may be returned in the enclosed envelope with your name and address printed or signed legibly in the upper left hand corner of the envelope. It must be received by *Virginia R. Brown* on or before **12 July 1991**, in order to be counted. The DNP bylaws require that a nominee proposed for a given post by not fewer than one-fiftieth of the members (47 for this election) shall be deemed nominated to that post.

If you are a DNP member, please exercise your right to nominate candidates for the upcoming DNP elections. In 1990 there were only 48 nominations forms received

by the Secretary-Treasurer. More members vote in the DNP elections, but for 1990 only about 800 election ballots were mailed in by members. **It is important to vote!**

4. DNP BUSINESS MEETING AT THE 1991 SPRING APS MEETING, WASHINGTON, D.C.

The Business Meeting of the DNP was held at 5 pm, Wednesday, 24 April in the Auditorium of the Ramada Renaissance Techworld Hotel. The agenda included congratulations to the Bonner Prize recipient, Peter Twin, and to those elected to APS Fellowship in the DNP, Jolie A. Cizewski, Thomas W. Donnelly, Miklos Gyulassy, Stanley B. Kowalski, Kenneth S. Krane, Marcos Moshinsky, Fred Petrovich, Leo L. Riedinger, and Lee Schroeder. The outgoing DNP Chair, Jim Ball, thanked other officers and committee members with whom he had worked during his tenure; he then introduced new members and turned the meeting over to the incoming Chair, Gary Crawley.

Other items on the agenda included announcements about the MSU East Lansing Fall Meeting program plans from the new DNP Program Chair, Wick Haxton, a report on the DOE and NSF budget processes from Dave Hendrie (DOE) and Jack Lightbody (NSF), and an NSAC report from the outgoing DNP Chair, Jim Ball. John Schiffer gave a report on NuPECC, a European community nuclear physics long range planning committee, which held a workshop in March 1991 in Ruthin Castle in the UK (See Item 13). Lee Riedinger outlined the expansion in goals of the newly formed Nuclear Science Resources Committee; the current membership is listed in Item 1 of this newsletter. Riedinger also reported on the stable isotopes supply situation. See Item 12 of this newsletter for a report from the Nuclear Science Resources Committee. A report on the Stable Isotope Supply Problem can be found in the November Newsletter #84.

The APS has a new Constitution and Bylaws. The APS subunits have been requested to revise their bylaws in a similar fashion. A Constitution and Bylaws Committee consisting of J. B. Ball, V. R. Brown, G. M. Crawley, and W. C. Haxton has been formed to frame the new DNP Constitution and Bylaws. At the DNP Business Meeting the following tentative schedule was outlined. The preliminary version would be presented to the Executive Committee at the East Lansing meeting and then the final version distributed to DNP members with the February newsletter, at the latest. The new DNP Constitution and Bylaws would be put to a vote by the DNP members present at the 1992 DNP Business Meeting of the Spring APS meeting in Washington. A possible acceleration of this schedule is under consideration.

5. DNP FALL MEETING, EAST LANSING, MICHIGAN, 23-27 OCTOBER 1991

The Annual Fall Meeting of the Division of Nuclear Physics will be held October 23-27, 1991 on the campus of Michigan State University in East Lansing, Michigan. All sessions of the meeting will be held in the Kellogg Center, an on-campus conference center and hotel. The hosts for the meeting and its associated workshops will be the National Superconducting Cyclotron Laboratory, the Department of Physics and Astronomy, and Michigan State University.

Michigan State University has over 43,000 students on its beautiful campus in central-lower Michigan. Founded as a pioneer land-grant institution in 1855, MSU has expanded its early concentration on agricultural science to now include more than 200 programs of undergraduate and graduate study, and has over 2000 faculty members in 14 colleges. Among the many attractions on campus are the Wharton Center for Performing Arts, the Beal Botanical Gardens, the Kresge Art Center, the MSU Museum, the Abrams Planetarium, and many acres of natural area.

The main divisional meeting, held Thursday-Saturday, will consist of a plenary session, five sessions of invited papers, and approximately 18 sessions of contributed papers. There will also be a DNP "town meeting" and meetings of users' groups of various laboratories. Overhead projectors will be provided for all sessions, with slide projectors also available for invited talks on request.

Reception and Banquet

A welcoming reception is planned for the evening of Wednesday, October 23, and a banquet will be held Friday evening, October 25, both in the Kellogg Center. No formal companions' program is offered, but information about activities and points of interest in the area will be available.

Meeting Program

Six invited sessions are planned for this meeting. The first one is the opening plenary session. Two of the invited sessions will be on topics selected by the Program Committee at the Washington meeting. One session on "*Recent Polarization Experiments*", based on suggestions from several committee members, is being arranged by P. Stoler (Rensselaer). Another session with the title "*A Massive Neutrino in Nuclear Beta Decay?*" is being organized by A. E. Champagne (Univ. of North Carolina). A third session on "*Phase Transitions in Nuclear Reactions*" is being arranged by the Local Committee. Two other sessions of invited papers will be selected by the Program Committee from nominations of individual

speakers by the DNP membership. The deadline date for the nomination forms, which were included with the last newsletter, to reach the Program Committee Chairperson, Wick Haxton, was 3 May 1991.

Plenary Session

Now that the "Long Range Plan" for nuclear physics is in place, the DNP Fall meeting opening Plenary Session has changed its focus somewhat. The first "New Style Plenary Session" was at Urbana Champaign in October 1990 and had the title "*Nuclear Physics in Society*." The anticipated topic for the East Lansing meeting is "*Nuclear Physics at the Interfaces*."

"Town Meeting"

A DNP "town meeting" that will allow some discussion of issues such as DOE and NSF funding, an NSAC report by G. Crawley, and other items of interest to the community is being scheduled for Friday afternoon .

Pre-conference Workshops October 23, 1991

Two workshops are planned for Wednesday prior to the main meeting. The topics are "*Intensity Interferometry in Nuclear Reactions*", organized by George Bertsch and Konrad Gelbke; and "*Physics with Radioactive Ion Beams*", organized by David Morrissey and Brad Sherrill. The programs for these workshops will include a review of current areas of activity for a general nuclear physics audience, including students, and will not be solely for specialists.

The workshop on "*Intensity Interferometry in Nuclear Reactions*" will evaluate the techniques used to extract information about the source size and duration from correlation measurements in nuclear reactions. The main emphasis will be on pi-pi and p-p correlations in heavy ion collisions, considering all energy regimes. Following general talks there will be specific contributions discussing the validity of the theoretical approximations and presenting new results and planned experiments.

The workshop on "*Physics with Radioactive Ion Beams*" will review the current status and future prospects for science with radioactive beams. Emphasis will be given to a review of the results of completed experiments and the improvements and prospects for experiments using the next generation of radioactive beam facilities. Discussions of experiments using reaccelerated beams and beams produced and used at high energy will be included. A preworkshop will be held on Tuesday to discuss the progress in plans for a dedicated North American radioactive ion beam facility.

Post-conference Workshop October 27, 1991

A workshop is also being planned for Sunday following the main meeting, on the topic: "*Nonlinear Dynamics in Nuclear and Accelerator Physics*," organized by Wolfgang Bauer, Martin Berz, and Mel Month. This workshop will be more specialized than the others, and will involve the participation of the Division of Beam Physics. The purpose will be to explore applications of new mathematical methods in areas of mutual interest to these two groups.

Registration and Meals

Preregistration fees for the 3-day main meeting are \$80 for APS members, \$150 for nonmembers, and \$10 for retired and student members. After October 1, 1991 the corresponding fees are \$100, \$170, and \$15, as indicated on the registration form. Registration fees for the workshops are \$20, increasing to \$25 after October 1, with the fees being waived for students. Complete and mail the registration form with payment. Make your check payable in U.S. dollars to Michigan State University. Allow one week for your return confirmation.

For immediate confirmation of registration, use your VISA/MasterCard by telephone, (800) 447-3549 [in Michigan (800) 462-0846] or FAX (517) 353-3900.

Written cancellations by preregistrants postmarked prior to October 1, 1991, will be refunded. No refund will be allowed for withdrawal postmarked after October 1, 1991. If you fail to attend the program and do not notify Engineering Lifelong Education, you are liable for the entire fee.

Meals are available both at Brody Residence Hall and at Kellogg Center. Brody is a student residence hall immediately across Harrison Road from Kellogg. Lunch at the Brody cafeteria is all you can eat at a fixed price of \$5.04 tax included. Physicists at past conferences have been pleased with the quality and quantity of Residence Hall food. Kellogg Center is the University's showpiece food service. Lunch at Kellogg is served and is very good, but more expensive at \$12 gratuity and tax included. You may choose either facility on any one day by checking the blanks on the preregistration form. Brody and Kellogg meals must be reserved in advance to assure a place. Only a very limited number of lunch tickets will be available on-site.

NOTE: The program break for lunch is fairly short. The most efficient way to eat lunch is to select either Brody cafeteria or Kellogg group meals. Public restaurants are about a 15 minute walk from Kellogg Center.

The Fall Banquet is in Kellogg Center on October 25. The banquet is optional and extra at \$25. Other dinners

are on your own; at registration a restaurant guide to the area will be provided.

Coffee and rolls will be available each morning. If you prefer a full breakfast, the public dining rooms in Kellogg and in the Holiday Inn both offer a wide selection. There is a restaurant adjacent to University Inn as well. Brody Residence Hall also offers breakfast at a fixed price; tickets are available at the individual residence hall reception desks. All of these facilities are open by 7:00 a.m.

Lodging

The Fall Meeting will use four hotels, with a limited amount of additional student housing. Rates and services vary. All hotel rooms should be reserved via the registration form attached by October 1, 1991, to qualify for the conference rates. The order the hotels are listed in below reflects proximity to the program sessions. The conference will operate a morning and evening shuttle, but there will not be continuous service. If you drive, be prepared for parking charges at the session site. The room rates quoted below are subject to an addition 5% county room tax and to an additional 4% Michigan sales tax. The Kellogg Center is exempt from the county tax, but 4% sales tax will be added. If your first choice hotel is full, a reservation will be made where space is available in the order you specify on the form.

Kellogg Center is the University conference center and the site of all sessions. The Center is also a full service hotel which has just completed a twenty million dollar renovation and has become a campus showpiece. Kellogg will honor the Federal per diem for hotels: the rates per night are \$51 single occupancy, \$55 double occupancy. Sales tax will be added to the rates. Kellogg has a public restaurant and a cafeteria. Parking fees are waived for overnight guests; those driving from other hotels or commuting to Kellogg pay a maximum of \$5 per day parking. Kellogg is the appropriate choice for those who wish maximum convenience in access to sessions. One hundred-fifty rooms are available.

Holiday Inn at University Place is in downtown East Lansing about three quarters of a mile from Kellogg Center. This new facility opened in the Fall of 1988 and it offers all the services of Holiday Inns everywhere, including an indoor pool. The rates are \$63 per night single or double occupancy. The county room tax and sales tax will be added. The Holiday Inn has a public restaurant. Parking fees are waived for overnight guests. The Holiday Inn is most convenient for shopping. One hundred-forty rooms are available.

University Inn is near the Interstate I-496 exit on Trowbridge Road about one mile from Kellogg Center. University Inn is a motel: each room has a direct outside

entrance. The rates are \$32 per night single occupancy, \$34 double occupancy. The county room tax and sales tax will be added. There is no charge for parking. While University Inn does not operate a food service, three restaurants and several fast food places are within a block. University Inn is convenient for motorists. One hundred rooms are available.

Quality Inn is on Grand River about one and one-half miles from Kellogg Center. The Quality Inn has been renovated and converted to enclosed entrances; the pool is also enclosed. The rates are \$46 per night single occupancy, \$55 double occupancy. The county room tax and the Michigan sales tax will be added to these rates. There is no charge for parking. Quality Inn has a restaurant. This hotel is close to a shopping center, and to Interstate I-496 and US-127. Seventy rooms are available.

Student housing is available in Butterfield Guest House on a very limited basis. Butterfield is immediately across Harrison Road from Kellogg Center. If you will be a full time student in October 1991, and you wish further information, check the appropriate box on the registration form and an application will be mailed back to you. If student housing is filled, a reservation will be made at the facility you stipulate on your form.

Travel and Airfare Discounts

East Lansing is located about 80 miles west of Detroit and the nearby Lansing Airport is served by several major air carriers. The MSU Campus is about a 20-minute taxi ride from the airport.

Northwest Airlines is the "Official Airline" of the 1991 meeting of the Division of Nuclear Physics. Through a contractual agreement with Spartan Travel of East Lansing, Michigan, meeting participants wishing to fly into Lansing may receive a discount of either 45% off Northwest Airlines applicable round trip coach fare, or an additional 5% off their lowest applicable restricted round trip fare available at the time of booking. To make air reservations and obtain these discounts, please call Spartan Travel toll-free (800) 456-2238 between 8:30 AM and 5:30 PM EST and identify the group code G103 and state attending "Nuclear Physics Conference". These discounts do not apply to international travel, except that some discounts are available for flights from Canada.

Abstracts for Contributed Papers

In order to provide sufficient time for printing abstracts in the APS Bulletin, the deadline for contributed abstracts is **June 21, 1991**. Abstracts should conform to APS Bulletin format and be sent in triplicate to the Secretary/Treasurer of the Division of Nuclear Physics: Dr. V. R. Brown, Lawrence Livermore Laboratory, Box 808, L-297, Livermore, CA 94550. For express mail

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

Further details and the final program for the meeting and workshops will be given in the September Bulletin. Members of the Local Committee are Sam Austin, Walter Benenson, George Bertsch, Gary Crawley, and Jerry Nolen (Chairperson).

For further program information please contact the Local Conference Coordinator: Mrs. Shari Conroy, National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, MI 48824. Telephone: 517-353-5971 FAX: 517-353-5967 Bitnet: Conroy@MSUNSCL

For further information in regard to registration, meals and housing contact: Engineering Lifelong Education, 173 Engineering Building, Michigan State University, East Lansing, MI 488241226, Telephone (800) 447-3549 or, in Michigan, (800) 462-0846.

6. USER GROUP MEETINGS AT THE EAST LANSING MEETING

It is anticipated that many groups will wish to hold user group meetings during the DNP Fall Meeting at East Lansing, MSU. In order to schedule them so as to prevent conflicts with other activities and to have them announced in the September Bulletin, it will be necessary to notify Jerry Nolen of the Local Committee before **1 July 1991**.

7. FUTURE DNP FALL MEETINGS

The fall meetings for the next three years are as follows:

1991	October 23-26	E. Lansing, MI
1992	October 14-17	Santa Fe, NM
1993	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 has become a tradition which 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.

Members interested in hosting the 1994 DNP meeting at their institution should write to G. M.

Crawley before the 1991 DNP Fall Meeting at East Lansing.

8. NOMINATIONS FOR APS FELLOWSHIP

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

The DNP deadline is normally **1 April**. Nomination forms are available from Ms. Evelyn Bernstein (The American Physical Society, 335 East 45th Street, New York, NY 10017). Completed forms should be returned to Dr. N. R. Werthamer at the same address.

The 1992 DNP Fellowship Committee is comprised of J. B. Ball, (Chair), E. G. Adelberger, F. E. Bertrand, Jr. and E. J. Moniz. 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: 1) have a record of excellence in research that has been sustained several years, and 2) have done at least one major, original work that has influenced his/her speciality in a distinctive way.

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

9. 1992 DISSERTATION AWARD IN NUCLEAR PHYSICS

Purpose: To recognize biennially a recent Ph.D. in nuclear physics.

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.

Establishment and Support: This award was established in 1985 by members and friends of the Division of Nuclear Physics of the APS.

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 1991** 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 Professor Gerard M. Crawley, Physics Astronomy Department, Michigan State University, East Lansing, MI 48824.

10. NOMINATIONS FOR 1992 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 R. Robson, H. Feshbach, D. H. Wilkinson, C. S. Wu, J. P. Schiffer, S. T. Butler and G. R. Satchler, S. Polikanov and V. M. Strutinsky, Roy Middelton and W. Haeblerli, 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, and R. H. Davis, E. M. Henley, V. W. Hughes., and P. Twin.

Send the name of a proposed candidate with supporting information and a proposed citation before **1 September 1991** to: H. C. Britt, Chair, E-Division, Lawrence Livermore National Laboratory, L-289, Livermore, CA 94550.

11. PHYSICS NEWS IN 1991

Each year the AIP prepares a report entitled "Physics News". A committee chaired by the Vice-Chair of the DNP organizes articles with an attempt to insure a complete and representative description of the new developments in nuclear physics. This year's committee is listed in this newsletter.

In order to reach a wide audience, the material is prepared in the form of a simple article, resembling an essay or a review, and covering the recent developments in our field. In selecting topics for this year's article, the Committee will take into account the scientific importance for nuclear physics as well as the impact on other fields and society; topics should represent the breadth of the field. The results of recent experiments or the status of an unfolding research story of continuing interest are appropriate.

Suggestions and brief summaries from DNP members for this year's report should be sent *as soon as possible* to Wick C. Haxton, Physics Dept., FM15, University of Washington, Seattle, WA 98195.

12. BUDGET REPORT FROM THE NUCLEAR SCIENCE RESOURCES COMMITTEE, L. L. Riedinger, Jr. Chair

The President's budget request for fiscal year 1992 (beginning October 1, 1991) was submitted to Congress in early February. The proposal included overall good support for academic basic research, which is programmed to rise in funding by 8% to \$13.3 billion, nearly twice the assumed inflation rate. In scientific areas there are three large interagency emphases. Spending on High Performance Computing and Communications would increase by 30% to \$638 million, spread over eight agencies with most going to DARPA (\$49 million rise), NSF (\$44 M up), DOE (\$28 M up), and NASA (\$18 M rise). Global Change research would rise by 24% to \$1.18 billion in nine agencies. And, spending on Science and Math Education would increase by 13% to \$1.94 billion.

The requested increase for the National Science Foundation is 17.5% to a level of \$2.72 billion, representing a renewed emphasis on doubling its budget. Included in this is a requested 16% increase for Mathematical and Physical Sciences (to \$650.1 M), 10% increase for Physics (to \$142.0 M), and 10% rise for Nuclear Science (to \$47.2 M). There are several other interesting aspects of the NSF request. (a) A new program for Academic Research Instrumentation (\$50 M) is requested. Competitive grants would be made to universities for major pieces of equipment (\$200 K to \$4 M). Non-federal sources would have to provide 50% cost sharing for the equipment. (b) There is a request for \$23.5 M to begin construction of the \$211 M LIGO (Laser Interferometer Gravitational Wave Observatory). (c) The budget includes a \$16 M item for two 8-meter infrared-optimized telescopes to be built in a cooperative program with Canada and the United Kingdom (the U.S. share would be half, \$176 M over eight years). (d) A new program (\$84 M) is proposed emphasizing the synthesizing and processing of materials.

In the Department of Energy, the FY92 budget request for Nuclear Physics is \$342 million, up 9% over FY91. This includes a 7% increase in operating (to \$225 M), and increase in construction funds for the Relativistic Heavy Ion Collider (RHIC) from \$13.5 to \$49.4 million, and a decrease in the CEBAF construction budget from \$58.5 to \$31.8 million. The High-energy Physics program is scheduled to increase by 13% to \$666 million, while Basic Energy Sciences would increase by only a half percent to \$715 million. The big increase in the DOE General Science program is for the SSC, up from \$243 to \$543 million. More details on the federal budget request can be found in *Physics Today*, April, 1991, page 79.

The Nuclear Science Resources Committee has expanded its goals for the coming year. The ongoing activities include obtaining and analyzing the federal budget request soon after its submission to Congress in early February, collecting and distributing new congressional committee assignments, keeping the DNP informed by newsletter articles and reports to the Executive Committee and the membership at division meetings, and arranging visits to Capitol Hill. The expanded activities include more frequent (monthly) reports and updates of the federal budget process to the DNP, the preparation of handouts (budget information, congressional committee membership, tips on how to be most effective, etc.) for interested DNP members who want to discuss broad issues with Congressional staff members and elected representatives. In addition the new NSRC Committee (see Item 1 for membership) is considering collecting and organizing information after such visits by DNP members.

The Committee also intends to resurrect the program of regular electronic mail messages to interested DNP members. The earlier list of e-mail addresses will be used, and others can be added by sending a message to Gary Crawley at crawley@msupa.bitnet.

13. LONG RANGE PLANNING FOR NUCLEAR PHYSICS IN EUROPE/NUPECC REPORT, J. P. Schiffer

The European community has organized itself by forming a planning committee: NuPECC, which is to help intra-European collaborative ventures in nuclear physics. A long range plan is being developed and a workshop took place in Ruthin Castle in the UK during March. Six working groups had been organized with the titles of 'Structure of Nuclei', 'Hadronic Physics with Electrons', 'Physics with High-Energy Hadron Beams', 'Quark Gluon Plasma', 'Properties of Nuclear Matter', and 'Fundamental Interactions and Interdisciplinary Research'. Physics and possible future facility concepts were presented. These included discussion of forming a working group towards developing a conceptual design for a 15-GeV electron

machine, several hadronic facilities, radioactive beam facilities, the possibility of heavy ions in the LHC, and a possible lower-energy heavy ion collider. The question of choices or relative priorities did not come up at the workshop. A report on "The Future of Nuclear Physics in Europe: Opportunities and Perspectives" is being prepared by the NuPECC committee and should be ready by the end of 1991.

14. NEWS OF THE NATIONAL INSTITUTE FOR NUCLEAR THEORY, E. M. Henley

The National Advisory Committee for the Institute for Nuclear Theory will meet in August of this year to help determine the program for 1993. We continue to seek your assistance in proposing topics that should be considered for programs of 3-4 months duration and for workshops of 1 week to 10 days. The workshops could take place elsewhere than Seattle.

Please submit proposals of about one to two pages in length and should include a list of important physicists who would insure the success of the proposed program or workshop.

Please send your suggestions to:

Ernest M. Henley
Institute for Nuclear Theory
University of Washington
Seattle, WA 98195

15. ANNUAL REVIEWS OF NUCLEAR AND PARTICLE SCIENCE

The Division has continued the agreement with Annual Reviews, Inc., which will enable DNP members to obtain copies of the "*Annual Review of Nuclear and Particle Science*" at a 30% discount when purchased through the DNP Secretary-Treasurer, Virginia R. Brown, Lawrence Livermore National Laboratory, P. O. Box 808, L-288, Livermore, CA 94550.

1991 Prices: In what follows the price for U.S.A. and Canada is before the slash; the price elsewhere follows the slash. Volume 40 was published in December 1990. Volume 40 is \$55/\$60 retail and \$39/\$42 for DNP members. Vols. 38-39 are \$51/\$56 retail and \$36/\$40 for DNP members. Vols. 12-37 are \$36/\$41 retail and \$26/\$29 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.* The order should include the address of the DNP member to whom the

volume will be mailed (fourth class book rate). Books will be shipped directly from Annual Reviews, Inc.

16. FUTURE CONFERENCES

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

"National Summer School on Nuclear Physics", 16-28 June 1991, to be held in Madison, Wisconsin, USA. [For further information contact: Prof. Baha Balantekin, Dept. of Physics, University of Wisconsin, Madison, WI 53706].

"Real Time Computer Applications in Nuclear, Plasma and Particle Physics," June 24-28 1991, sponsored by the Nuclear and Plasma Sciences Society of the IEEE (preceded by a short course). [For further information contact: K. D. Mueller, KFA Julich, D-5170 Julich, W. Germany, bitnet: "mueller@djukfa52" or US contact: Richard Kouzes, Princeton University, phone: (609) 258-4343, email: "kouzes@pupcyc.princeton.edu"].

"1991 Gordon Research Conference on Nuclear Physics", July 22-26, 1991, at the Tilton School, Tilton, New Hampshire. [For further information contact: James P. Vary, Physics Dept., Iowa State University, Ames, IA 50011, phone: (515) 294-8894, fax: (515) 294-0689, bitnet: "jvary@alisuvax"].

"Hadron '91 4th International Conference on Hadron Spectroscopy" to be held 12-16 August 1991 and preceding this a *"Summer Course on Hadron Spectroscopy"* to be held 5-9 August at the Univ. of Maryland, College Park, MD. [For further information contact: D. C. Peaslee, University of Maryland, College Park, MD 20742, phone: (301) 405-6070, bitnet: "hadron91@umdhep", telex: 887-294, fax: (301) 699-9195].

"The Fourth Chemical Congress of North America" to be held 25-30 August 1991 in New York City. Symposia include "Nucleus-Nucleus Collision Mechanisms," "Ion-Solid Interactions," and "Neutrino Science: Recent Advances", to be held 26-27 August. [For further information contact: S. W. Yates, Univ. of Kentucky, Lexington, KY 40506, bitnet: "YATES@UKCC, or Dr. R. L. Hahn, Brookhaven National Laboratory, Upton, NY 11973, bitnet: "RHAHN@BNLDAG".

"Second International Conference on On-Line Nuclear Orientation and Related Topics", to be held 16-19 October, 1991 at Oak Ridge, TN. [For further information contact: Ken Krane, Physics Dept. Oregon State Univ. Corvallis, OR 97331, Phone: (503) 753-4569, fax: (503) 737-1683, e-mail: "Kranek@physics.orst.edu"].

"The 2nd Annual October Astrophysics Conference in Maryland, Testing the AGN Paradigm," to be held Oct. 14-16,

1991 at College Park, Maryland. [For further information please contact: Astrophysics Conference, USRA, Code 610.3, Goddard Space Flight Center, Greenbelt, MD 20771, phone: (301) 286-5057, e-mail "(SPAN) NSSDCA::USRA]."

"Ninth International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions--Quark Matter 1991", 11-15 November 1991, to be held in Gatlinburg, TN, USA. [For further information contact: Dr. Frank Plasil, Oak Ridge National Laboratory, P.O. Box 2008, MS-6372, Oak Ridge, TN 37831, phone (615) 574-4711, fax (615) 576-2822, bitnet: "qm91@orph01"].

"Eighth Winter Workshop on Nuclear Dynamics", January 18-25, 1992, to be held in Jackson Hole, Wyoming. [For further information contact: Wolfgang Bauer, NSCL/Cyclotron Laboratory, Michigan State Univ., E. Lansing, MI 48824, phone: (517) 353-5965, fax: (517) 353-5967, bitnet: "bauer@msunsl"].

"Baryons '92 ; International Conference on the Structure of Baryons and Related Mesons", to be held 1-4 June 1992 at Yale University, New Haven, CT. [For further information contact: Moshe Gai, Physics Dept., Yale University, 272 Whitney Ave., New Haven, CT 06511, phone: (203) 432-5195, fax: (203) 432-3522, bitnet: "gai@yalevm"].

"1992 International Nuclear Physics Conference" to be held July 26 to August 1, 1992 in Wiesbaden, Germany. [For further information contact: Prof. Rudolf Bock, International Nuclear Physics Conference, GSI, P.O. Box 110552, D-6100 Darmstadt 11, Germany, phone: 49 6151 359-888 and 359-889, fax: 49 6151 359-989, telnet: 04-19593, bitnet: "INPC@DDAGS13"].