Division of NuclearPhysics

The American Physical Society

# Newsletter No. 126 February 2001

## TO: Members of the Division of Nuclear Physics, APS FROM: Benjamin F. Gibson, LANL – Secretary-Treasurer, DNP

## ACCOMPANYING THIS NEWSLETTER:

• Poster for Hawaii 2001



## Future Deadlines

- 1 April 2001 APS Fellowship Nominations
- 3 May 2001 Speaker Nominations for Fall Meeting
- 1 July 2001 Nominations for Bonner Prize
- 1 July 2001 Nominations for Bethe Prize
- + 1 July 2001 Nominations for Dissertation Award

## WWWHomePage for theDNP: http://nucth.physics.wisc.edu/dnp

A WWW home page for the Division of Nuclear Physics is now available at "http://nucth.physics.wisc.edu/dnp." Information of interest to DNP members -- current research topics, deadlines for meetings, prize nominations, forms, and useful links are provided. Each DNP Newsletter is posted, in advance of the copy sent via post. Comments and suggestions are solicited. Please send them to Baha Balantekin at

"dnp@nucth.physics.wisc.edu"

## 1. RESULTS OF ELECTION: OFFICERS AND EXECUTIVE COMMITTEE FOR 2001

By the deadline date of 12 January 2001, 588 properly identified ballots were received for the election of officers and members of the Executive Committee. The results of the election are as follows: Baha Balantekin was elected as Vice-Chair and Benjamin F. Gibson was elected as Secretary-Treasurer for one-year terms. Charlotte Elster, Harry Lee, and Brad Sherrill were elected to two-year terms on the Executive Committee. The counting of the ballots was done by Tellers *Gerry Hale, Joel Moss*, and *Philip Page*, and supervised by Kay Grady, all of LANL. The members of the 2001 Executive Committee, who assume their duties at the APS/AAPT Spring Meeting, are as follows:

Joel M. Moss, LANL, Chair (2001) Charles Glashausser, Rutgers, Chair-Elect (2001) A. Baha Balantekin, Univ. Wisconsin, Vice Chair (2001) R. G. Hamish Robertson, Univ. Washington, Past Chair (2001) Benjamin F. Gibson, LANL, Secretary-Treasurer (2001) J. Dirk Walecka, College of William & Mary Divisional Councilor (December 2001) Charlotte Elster, Ohio Univ. (2002) Barry R. Holstein, Univ. Mass. (2001) T. S. Harry Lee, ANL (2002) Bradley M. Sherrill, MSU (2002) Robert E. Tribble, Texas A&M (2001) Michael C. T. Wiescher, Notre Dame (2001)

## 2. CALL FOR DNP COMMITTEE SUGGESTIONS

The terms of some of the members of the following DNP committees expire in April 2001: Bethe, Bonner, Fellowship, Nominating, Home Page, and Education. Suggestions from the DNP membership for new members of these committees are welcome and should be sent to Joel Moss. A list of committee members for 2001/02 will be published in the August newsletter.

Inside ...

- Bonner, Bethe, Dissertation Award Winners
- 2000 APS Fellows
- NSAC Long Range Plan
- DNP00 Fall Meeting Success
- Spring Meeting Preview
- Call for Prize/Fellow Nominations
- Fall Meeting on Maui
- Future Conferences
- April 2001 DNP Symposia

## 3. 2001 BONNER PRIZE WINNERS

Richard Geller of the Institut de Science Nucleaire, Grenoble, and Claude Lyneis of the Lawrence Berkeley Laboratory have been named the winners of the 2001 Tom W. Bonner Prize in Nuclear Physics. Their citation reads: "For their critical leadership in conceiving and developing the electron cyclotron resonance (ECR) ion source and advanced ECR source, which have opened a new era in heavy ion studies of nuclear phenomena."

Go to www.aps.org and click on Prizes and Awards to read the background information on Dr. Geller and Dr. Lyneis.

## 4. 2001 BETHE PRIZE WINNER

Gerald E. Brown, Professor of Physics at the State University of New York, Stony Brook, has been named the winner of the 2001 Hans A. Bethe Prize. The citations reads:

"For his insightful analyses of the effects of various nuclear constituents on nucleon interactions and nucleon structure, and his contributions to new viewpoints on supernovae, neutron stars, and black hole formation."

Go to www.aps.org and click on Prizes and Awards to read the background information on Prof. Brown.

#### 5. 2001 DISSERTATION AWARD WINNER

Daniel Bardayan of Yale University has been awarded the 2001 Dissertation in Nuclear Physics Award for his thesis work under Peter Parker. The citation reads:

"For his innovative experimental development and measurement of the  $p({}^{17}\text{F},p){}^{17}\text{F}$  elastic scattering reaction at the Oak Ridge Holifield Radioactive Ion Beam Facility in order to find the key low-energy *s*-wave resonance for the  ${}^{17}\text{F}(p,\gamma){}^{18}\text{Ne}$  reaction. His measurements of the properties of this resonance greatly reduce the uncertainties in the  ${}^{17}\text{F}(p,\gamma){}^{18}\text{Ne}$  rate, which is crucial to an understanding of nucleosynthesis and gamma-ray production in novae as well as in the break-out to the *rp*-process in X-ray bursts."

Go to www.aps.org and click on Prizes and Awards to read the background information on Dr. Bardayan.

#### 6. NEW DNP FELLOWS

The following DNP members are newly elected (2000) Fellows of the APS. Please join us in offering congratulations.

Samuel Harry Aronson, Brookhaven National Laboratory Francis Edward Cecil, Colorado School of Mines Jerry Paul Draayer, Louisiana State University Vitaly Efimov, University of Washington David William Hertzog, University of Illinois Xiangdon Ji, University of Maryland Michael J. Leitch, Los Alamos National Laboratory Kevin Thomas Lesko, Lawrence Berkeley National Laboratory Ruprecht Machleidt, University of Idaho Michael Jeffrey Ramsey-Musolf, University of Connecticut Mark Anthony Riley, Florida State University Hans Georg Ritter, Lawrence Berkeley National Laboratory Demetrios G. Sarantites, Washington University

#### 7. LONG RANGE PLAN WORKING GROUP

The drafting of the 2001 NSAC Long Range Plan, under the chairmanship of James Symons (LBNL), will take place in Santa Fe during the week of 25–30 March. Members of the working group will include:

Baker, Keith Beene. Jim Beise, Betsy Bland, Leslie Bond, Peter Bowles, Tom Brenner, Daeg Busza, Wit Cardman, Larry Casten, Rick Cates, Gordon Cizewski, Jolie Fallon, Paul Filippone, Bradley Freedman, Stuart Fuller, George Garvey, Gerry Geesaman, Don Gelbke, Konrad Glashausser, Charles Glasmacher, Thomas Hallman, Tim Haxton, Wick Hertzog, Dave Jacak, Barbara Janssens, Robert Ji, Xiandong Kumar, Krishna Leemann, Christoph Lung, Allison Marx, Jay McLerran, Larry Meyer, Curtis Milner. Richard Moss. Joel Mueller, Al Mueller, Berndt Natowitz, Joe Nazarewicz, Witold Olinto, Angela Page, Shelley Pandharipande, Vijay Ramsey-Musolf, Michael Redwine, Bob Riley, Mark Robertson, Hamish Savard, Guy Seto, Richard Sherrill, Brad Shuryak, Edward Smith, Michael Symons, James Tribble, Bob Vigdor, Steve Weller, Henry Wiescher, Michael Zajc, Bill

Hampton University ORNL University of Maryland Indiana University BNL LANL Clark University MIT **JLAB** YaleUniversity University of Virginia Rutgers University LBNL Caltech UC Berkeley/LBNL UC San Diego LANL ANL MSU Rutgers MSU BNL University of Washington University of Illinois SUNY Stony Brook ANL University of Maryland University of Massachusetts JLAB JLAB LBNL BNL Carnegie-Mellon MIT LANL Columbia Duke University Texas A&M Tennessee/ORNL University of Chicago University of Manitoba University of Illlinois University of Connecticut MIT Florida State University University of Washington ANL UC Riverside MSU SUNY Stony Brook ORNL LBNL Texas A&M Indiana University Duke University Notre Dame Columbia

#### 8. REPORT ON THE DNP FALL MEETING IN WILLIAMSBURG, VIRGINIA, 4–7 OCTOBER 2000

The Annual Fall Meeting of the Division of Nuclear Physics, including three workshops, was held 4–7 October 2000 at the Radisson Fort Magruder Hotel and Conference Center in Williamsburg, Virginia. Blue skies and beautiful weather, along with the hotel's proximity to Virginia's historic 18th century capital, enhanced the meeting experience for participants.

The DNP Executive Committee is pleased to acknowledge the planning, hard work, and congenial hospitality of our Jefferson Laboratory hosts for the meeting. Thanks go Roy Whitney, chair of the local organizing committee, and his able co-chairs, Dennis Skopik (JLab) and Charles Glashausser (Rutgers University). In addition to the chairs, members of the local organizing committee were William Briscoe and Gerald Feldman (George Washington University) and John Price (University of California, Los Angeles).

Special thanks are due to JLab Staff Services – Ruth Bizot, Marty Hightower, Cynthia Lockwood, and Carol Sloane – for the long months of planning, orchestrating and executing that made the meeting such a logistical success. In addition, we are grateful to JLab Physics Division staff – Greg Adams, Heather Ashley, Marti Bennett, Shauna Cannella, Linda Cerraul, Lynne Chamberlin, Luci Collins, Sue Ewing, Rachel Harris, Shannan Kyte, Janet Prater, and Gladys Smith – for their tireless work preparing conference materials and equipment and handling the registration, information, and travel tables throughout the meeting.

Total registrations for the fall meeting were 749, including 74 undergraduates participating in the Conference Experience for Undergraduates (CEU) program, organized for the third year by Warren Rogers (Westmont College, Santa Barbara). An additional eight undergraduates also attended with their advisor Stephen Padalino (SUNY-Geneseo).

Registrations for the three workshops held on the Wednesday preceding the main meeting totaled 306. The first was "Physics and Technologies of RIA," organized by John Schiffer (Argonne National Laboratory) and Witek Nazarewicz (University of Tennessee and Oak Ridge National Laboratory). The workshop consisted of four talks on nuclear structure (S. Koonin, R. Janssen, B. Sherrill, and W. Nazarewicz), two on nuclear astrophysics (G. Fuller and M. Smith), two on fundamental interactions (S. Freedman and G. Sprouse), and three on accelerator technologies (G. Savard, J. A. Nolen, and D. Morrissey).

The second and third workshops, organized by Dennis Skopik and Charles Glashausser, met jointly in the morning under the collective title of "Electromagnetic Physics at the Next Energy Frontier" with four talks (T. Walcher, R. Milner, L. Cardman, and G. Garvey). In the afternoon, the sessions split into two, entitled, "Physics with Greater than 10 GeV Electron and Photon Beams" with six talks (G. Miller, M. Diehl, C. Meyer, R. Ent, A. Bruell, and A. Mueller) and "Detectors, Data Acquisition, and Data Analysis for Greater than 10 GeV Experiments" with six talks (A. Klein, F. Sauli, I. Giomatraris, R. Zhu, B. Gibbard, and G. Heyes).

On Wednesday evening, approximately 300 people attended a special symposium on RHIC:

"First Collisions:"

At the Dawn of a New Era in Heavy Ion Physics (A. Drees, SUNY-Stony Brook) Probing Heavy Ion Collisions at RHIC with the BRAHMS Detector

(F. Videbaek, BRAHMS Collaboration)

- First Results from the STAR Experiment at RHIC (T. Ullrich, Yale U)
  First Results from the PHOBOS Experiment at RHIC (P. Steinberg, BNL)
  Initial Results from the PHENIX Experiment at RHIC
  - (G. Young, ORNL)

The Plenary Session which opened the meeting on Thursday was entitled, "Future Directions of Nuclear Physics." Speakers and topics included Walter F. Henning (GSI Darmstadt and U Frankfort) on "Rare Isotope Physics," Wick Haxton (U Washington) on "Nuclear Symmetry Tests and the Electroweak Interaction" and Donald Gessaman (ANL) on "Spin-Flavor Physics, or How Vanilla is the Right Hand of your Proton?"

The meeting's five invited sessions covered a range of topics: "Matter in Extreme Conditions," "Electromagnetic Structure of the Nucleon," "Properties of Hadrons and Nuclei," "Contrasting Views of Nuclear Matter," and "Neutrino Physics in Revolution. Four mini-symposia were held during the meeting: "Correlations in Nuclei," "Recent Results with Radioactive Beams (I, II & III)," "First Results from RHIC (I, II & III)," and "Recent Applications of Nuclear Structure Calculations." Altogether, the mini-symposia and regular contributed paper sessions attracted 329 abstracts.

An undergraduate student poster session was held in conjunction with the Wednesday evening welcome reception, which was also highlighted by the musical entrance of a costumed colonial fife and drum corps. On Thursday afternoon, Jefferson Lab hosted a site tour and reception for attendees. In the evening, User Group meetings (Michigan State/NSCL, Atlas, Holifield RIBF, 88-in. Cyclotron, Gammasphere, MIT/Bates, JLab, and RHIC/AGS) were held. Throughout that day, there was a special High School Teachers' program arranged by Jan Tyler (JLab). On Friday, *Physical Review C* and *Physical Review Letters* hosted an afternoon drop-in session, where journal editors were available to answer questions and share concerns. The Business Meeting and Town Meetings for the Division of Nuclear Physics were also held on Friday afternoon, followed by a banquet at the hotel.

## 9. THE APS SPRING MEETING IN WASHINGTON, DC, 28 APRIL – 1 MAY 2001

The 2001 April Meeting of the APS will be held in Washington, DC, at the Renaissance Hotel. Participating units will include Divisions of Nuclear Physics, Particles and Fields, Astrophysics, Chemical Physics, Physics of Beams, and Computational Physics. Forums represented will include Physics and Society, Industrial Applied Physics, International Affairs, and History of Physics. The program will consist of three plenary sessions, 48 invited paper sessions, and more than 100 contributed paper sessions. Plenary sessions can be found by checking the APS Home Page (www.aps.org) under "Meetings," "April 2001," and looking for the section entitled Plenary Talks under Program Highlights.

To check out Washington, DC look at the URL: "www.washington.org" or the APS Home Page.

#### 10. NOMINATIONS FOR APS FELLOWSHIP DUE 1 APRIL

The procedure for nomination of APS members as Fellows of the Society has been recently modified by the APS Committee on Fellowship. Please check the nomination procedures on the APS home page (www.aps.org).

The DNP deadline for nominations is 1 April. Nomination forms can be downloaded from the APS home page or obtained by sending an email message to "fellowship@aps.org." Completed forms should be returned to the address indicated on the form. Nominations remain active for two years.

The 2001 Fellowship Committee is comprised of W. F. Henning (Chair), J. A. Carson, J. A. Cizewski, D. F. Geesaman, and W. A. Zajc. The DNP Fellowship Committee reviews the nominations for APS Fellowship which have been referred to the DNP and recommends a slate of candidates to the APS Fellowship Committee. Final approval of the new APS Fellows is made by the APS Council.

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 completed at least one major, original work that has influenced his/her specialty in a significant way. The APS requires membership for at least the prior year.

The list of APS Fellows (by APS subunit) elected in a given year appears on the APS Home Page in December and 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.

## 11. NOMINATIONS FOR THE 2002 TOM W. BONNER PRIZE IN NUCLEAR PHYSICS

This annual prize was established in 1964 as a memorial to Tom W. Bonner by his friends, students and associates. Previous winners are: H. H. Barschall, R. J. Van de Graaff, C. C. Lauritsen, R. G. Herb, G. Breit, W. A. Fowler, M. Goldhaber, J. D. Anderson and D. Robson, H. Feshbach, D. H. Wilkinson, C. S. Wu, J. P. Schiffer, S. T. Butler and G. R. Satchler, S. Polikanov and V. M. Strutinsky, Roy Middelton and W. Haeberli, R. M. Diamond and F. S. Stephens, B. L. Cohen, G. E. Brown, C. D. Goodman, H. A. Enge, E. G. Adelberger, L. M. Bollinger, B. Frois and I. Sick, R. H. Davis, E. M. Henley, V. W. Hughes, P. Twin, H. G. Blosser and R. E. Pollock, A. Arima and F. Iachello, E. K. Warburton, F. Boehm, J. D. Walecka, R. G. H. Robertson, J. M. Moss, V. R. Pandharipande, R. Arnold, and R. Geller and C. Lyneis.

The purpose of this prize, which currently consists of \$7,500 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 July 2001* to: Dr. P. D. Bond, Brookhaven National Laboratory, Upton, NY 11973.

## 12. NOMINATIONS FOR THE 2002 BETHE PRIZE IN NUCLEAR PHYSICS AND ASTROPHYSICS

This annual prize was established in 1996 by friends, students, and associates of Hans A. Bethe and announced at Bethe's 90th birthday celebration at Cornell. Previous prize winners are: J. Bahcall, E. E. Salpeter, I. Talmi, and G. E. Brown.

The purpose of the prize, which currently consists of \$7500 and a certificate citing the recipient's contributions, is "To recognize outstanding work in theory, experiment, or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics or closely related fields."

The award is to be made to one individual for outstanding accomplishments in these areas. No time limits are set on when the work was done.

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 the committee evaluate the nominee's contribution. While general statements concerning the value of the nominee's work are important, specific information defining what the nominee has contributed and how this contribution has impacted the field is needed.

Send name of proposed candidate and supporting material before *1 July* **2001** to: Dr. G. T. Garvey, MS H846, Los Alamos National Laboratory, Los Alamos, NM 87545.

# 13. NOMINATIONS FOR THE 2002 DISSERTATION AWARD IN NUCLEAR PHYSICS

The now annual 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, Zhiping Zhao, Greg Schmid, Yury G. Kolomensky, Eric Hawker, John Arrington, and Daniel Bardayan.

**Nature:** The award consists of \$2000 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.

**<u>Rules and Eligibility</u>**: 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 1 September 2001.

Send before *1 July 2001* the nomination of the proposed candidate, a statement of his/her contribution to the research as well as that of others and 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. These materials are required for each nominee and should be sent to Dr. J. M. Moss, MS H846, Los Alamos National Laboratory, Los Alamos, NM 87545.

#### 14. 2001 DNP FALL MEETING ON MAUI, 17–20 OCTOBER, V. R. Brown

The annual Fall Meeting will be an historic first joint meeting of the Division of Nuclear Physics (DNP) of the American Physical Society (APS) and the nuclear physicists of the Japanese Physical Society (JPS). The meeting will be held at the Outrigger Walilea Resort on the island of Maui in Hawaii on 17–20 October 2001. It is our hope that Hawaii 2001 (HAW01) will serve as a meeting ground to engender cooperation and the exchange of ideas among nuclear scientists from these and other Pacific-Rim countries.

#### Hotel

All conference meetings and sessions will be held at the Outrigger Walilea Resort located on the sparkling Pacific shores of Maui's south coast. The Outrigger offers multi-lingual guest relations staff, two restaurants, swimming pools, a Hawaiian culture program, etc. The Outrigger Walilea Resort is about 25 miles from the Maui airport. A room rate, which was negotiated by the Conference Coordinator, Carol Kuc, in consultation with the Organizing Committee is \$149 (plus tax). This rate includes up to two guests per room. We have reserved 350 rooms at this rate. Because it is difficult to anticipate attendance at this, first of its kind, meeting and because the interest appears to be greater than anticipated, we have opened a web site for early room reservation, so that we can determine whether additional space in adjacent hotels should be sought. Early registration and hotel reservations can be made at the URL: http://www.cccmeetings.com.

## Wailea, Maui, Hawaii

Wailea has been called the crown jewel of Maui. This ancient choice of Hawaiian kings provides an ideal setting for the first joint meeting of the nuclear physicists of the Japanese Physical Society (JPS) and the Division of Nuclear Physicists (DNP) of the American Physical Society (APS). This lovely atmosphere of golden sand beaches, the sparkling blue Pacific, lush tropical gardens of brilliantly colored exotic blooms, swaying palms, and nearby ancient volcanoes will be a pleasant backdrop for our meetings. Leisure time activities include swimming, snorkeling, kayaking, sailing, tennis, shopping, and golfing with a choice of three world-class PGA championship golf courses. There is an oceanfront walking path ideal for discussing physics with new and old colleagues between sessions.

## Meeting Structure

HAW01 will be a four-day meeting. There will be no workshops preceding the HAW01 meeting. The additional day will be used for sessions needed to accommodate the two physical societies. A plenary session to open the meeting and to highlight the physics of the two countries is being planned. The remainder of the meeting will consist of morning and afternoon/evening sessions of three to four hours. Typically, these sessions will consist of one invited-paper session running in parallel with multiple sessions of contributed papers and mini-symposia. As is usual, mini-symposia will involve one invited talk followed by contributed papers all on the same topic. The Organizing and Program Committees view mini-symposia as ideal sessions to integrate the two communities along topics of mutual interest. If you have ideas for topics or would like to become involved, please contact the Program Committee Chair for HAW01, Charles Glashausser. The JPS and APS are accustomed to different session structure and time slots. In order to accommodate both Societies at HAW01, contributed talks will be 15 minutes, a 12-minute talk with three minutes allotted for questions and discussion. Invited session talks will be 45 minutes of which 10 minutes will be allotted for questions and discussion. Lead invited talks in mini-symposia will be 30 minutes (25 + 5). All speakers are urged to speak clearly and slowly and to include important points on their transparencies.

## Satellite Meetings

It is anticipated that a number of satellite (collaboration) meetings may be held either before, during, or after the official meeting. The Walilea room rates were negotiated to include days before and after the meeting, to accommodate people's needs. In order to arrange space for satellite meetings, please send your requests to Stuart J. Freedman (sjfreedman@lbl.gov) of the Organizing Committee.

#### International Advisory Committee

The membership of the International Advisory Committee for Hawaii 2001 (HAW01) is :

Akito Arima, Co-Chair Sam M. Austin D. Allan Bromley Hiroyasu Ejiri Herman Feshbach (deceased) Judy R. Franz Hermann A. Grunder Ernest M. Henley Kiyomi Ikeda Ernest J. Moniz Peter Paul Katsuhiko Sato John P. Schiffer, Co-Chair Youji Totsuka George H. Trilling Erich W. Vogt Toshimitsu Yamazaki Koichi Yazaki

## **Organizing** Committee

The membership of the Organizing Committee for Hawaii 2001 is:

Richard Boyd Virginia Brown (Chair) Stuart Freedman Ben Gibson Masayasu Ishihara Shigeru Kubono Joel Moss Shoji Nagamiya Makoto Oka Hiroshi Toki

#### **Conference** Coordinator

Making hotel and meeting arrangements for Hawaii 2001 is:

The Complete Conference Coordinators, Inc. 1280 Iroquois Ave., Suite 408 Naperville, IL 60532 Fax: (630) 416-3333 Carol E. Kuc, CMP, President

#### Important Dates

The deadline for electronic submission of abstracts is **29 June 2001**. The meeting ID is HAW01. Instructions and abstract templates can be obtained by sending a message to abs-request@aps.org; enter "request HAW01" as the subject and in the body of the message. Direct web submission of abstracts is encouraged, because it leads to fewer errors; the LaTeX-based template can handle properly ONLY the commands provided in the template.

The early registration deadline is **15** August **2001**. For hotel reservations and meeting registration please utilize the web site http://www.cccmeetings.com. A downloadable PDF file will be available for those wishing a hard copy format.

#### 15. FUTURE DNP FALL MEETINGS

2002	October 9–12	East Lansing, MI
2003	October	

The dates include the Wednesday "workshops," which are normally 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. The Maui meeting will be an exception — no workshops but a four-day 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.

#### 16. FUTURE APS SPRING MEETING INFORMATION

2002	April 20–23	Albuquerque, NM
2003	April	Philadelphia, PA
2004	April	Denver, CO

The 2002 APS Spring Meeting will move to Albuquerque, NM and the 2003 meeting will be in Philadelphia, PA. Any comments/ suggestions should be sent to APS Meetings Manager, Donna Baudrau (baudrau@aps.org).

## 17. E-MAIL ADDRESS INFORMATION REQUESTED

The APS membership directory is online through the APS Web site (http://www.aps.org). Check your own address information — name of the service (directory) and the password (F=ma) are case sensitive. Most important, update your e-mail address. Despite being computer literate authors — some 85% of the submissions to *Phys. Rev. C* are compuscripts — DNP members do not outshine their fellow APS members in registering their e-mail addresses, although 94% of the DNP members do have an e-mail address listed with the APS. Is yours current?

Membership information can be updated by sending an e-mail message to "membership@aps.org" or directly on the Web.

# 18. 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 B283, Los Alamos, NM 87545.

**2000 Prices:** The dual prices (separated by a slash) listed below correspond to USA/other countries including Canada. Volumes 13–26, 28–29, 31–33, and 35–41 are \$55/\$60 retail and \$38.50/\$42 for DNP members. Volumes 42 and 43 are \$59/\$64 retail and \$41.30/ \$44.80 for DNP members. Volumes 44 and 45 are \$62/\$67 retail and \$43.40/\$46.90 for DNP members. Volume 46 is \$67/\$72 retail and \$46.90/\$50.40 for DNP members. Volumes 47, 48, and 49 are \$70/\$75 retail and \$49/\$52.50 for DNP members.

Other Annual Reviews series publications are also available. A complete listing of topics and authors for the current volumes and back volumes of Annual Reviews publications may be viewed on the Annual Reviews Web Site at http://www.AnnualReviews.org. The Web Site also features a fully searchable abstracts data base for all Annual Reviews publications, which allows visitors to search by author name or key words.

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% GST (Reg. #121449029 RT).* 

#### **19. FUTURE CONFERENCES**

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

"16th International Conference on Cyclotrons and their Applications, CYCLOTRONS 2001," 12–17 May 2001, Michigan State University, East Lansing, Michigan. Contact: Felix Marti, National Superconducting Cyclotron Laboratory, MSU, East Lansing, MI 48824-1321, USA, Fax: 517-353-5967, e-mail: marti@nscl.msu.edu.

NATO Advanced Research Workshop on "The Nuclear Many-Body Problem 2001," 2–5 June 2001, Brijuni, Croatia. Contact: Prof. Eckhard Krotscheck, Institute for Theoretical Physics, Johannes Kepler University, Altenberger Strasse 69, A-4040 Linz, Austria, e-mail: Eckhard.Krotscheck@jk.uni-linz.ac.at. Workshop Directors: Witek Nazarewicz and Dario Vretenar, e-mail: nuclear@ phy.hr; WWW: http://www.phy.hr/nuclear2001.

"ENAM-2001," 3rd Conference on Exotic Nuclei and Atomic Masses, 2–7 July 2001, Haemeenlinna, Finland, Contact: ENAM2001, Department of Physics, University of Jyvaeskylae, P.O. Box 35 (YS), FIN-40351 Jyvaeskylae, Finland, Fax: +358-14-260-2351, WWW: http://enam2001.jyu.fi/.

**"MENU2001,"** 6–31 July 2001, Washington, DC. Contact: William Briscoe, The George, Washington University, Telephone: (202) 994-6788, e-mail: briscoe@gwu.edu; or Helmut Haberzettl, The George Washington University, Telephone: (202) 994-0886, e-mail: helmut@gwu.edu.

"QCD in Extreme Conditions: High Temperature, High Density and Small-x," Gordon Research Conference on Nuclear Physics, 22–27 July 2001, Newport, Rhode Island. Contact: Wit Busza, Bldg. 24-510, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139-4307, e-mail: busza@mit.edu.

"INPC 2001," International Nuclear Physics Conference, 30 July – 3 August 2001, University of California, Berkeley, California. Contact: INPC 2001, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 937, Berkeley, CA 94720, e-mail: inpc2001@lbl.gov, WWW: http://www.lbl.gov/~inpc2001/.

"9th International Conference on the Structure of Baryons, BARYONS 2001," 30 September – 6 October 2001, Jefferson Lab, Newport News, Virginia, USA, Chairs: Nathan Isgur and Bernhard Mecking. Contact: Sue Ewing, Jefferson Lab, 12000 Jefferson Ave., MS12H2, Newport News, VA 23606, e-mail: BARYONS2001@jlab.org, Telephone: 757-269-6363, Fax: 757-269-7398, WWW: http://www.jlab.org/intralab/calendar/archive00/ baryons.html.

## Spring Meeting — Washington, DC April 28 – May 1, 2001

#### SYMPOSIA OF THE DNP Renaissance Hotel

10:45 Saturday, Grand Ballroom N/C (DNP/DPF)

- B1. COSMIC RAYS: FROM KNEE TO THE ANGLE
  - T. Gaisser, Presiding
- S. Swordy (Univ. Chicago), "Cosmic Rays into the Knee"
- W. Springer (Univ. Utah), "Observing Ultra High Energy Cosmic Rays: Experimental Techniques and Results"
- S. Tilav (Univ. Oxford), "High Energy Neutrino Astromony: Current Status and Future Prospects"
- G. Farrar (New York Univ.), "Ultra High Energy Cosmic Rays Revolutionary Particle Physics or Revolutionary Astrophysics"
- R. Schlickeiser (Ruhr Univ. Bochum), "Cosmic Ray Acceleration: Sites and Mechanisms"

10:45 Saturday, Auditorium (DNP)

B6. <u>PROPERTIES OF HADRONS AND NUCLEI</u>

P. D. Bond, Presiding

- G. Bollen (NSCL / Michigan State Univ.), "New Mass Determinations using a Penning Trap"
- P. R. Page (Los Alamos National Laboratory), "A Relativistic Spin Symmetry in Heavy-Light Quark Mesons"
- V. Zelevinsky (NSCL / Michigan State Univ.), "Nuclear Structure and Ideas of Quantum Chaos"
- D. S. Carman (Ohio Univ.), "Strangeness Production in Electromagnetic Interactions off the Proton"
- S. Kubono (CNS / Univ. Tokyo), "Investigation of Explosive Hydrogen Burning Process with a New Low-Energy RIB Separator"
- 14:30 Saturday, Auditorium (DNP)
- C6. <u>ELECTROMAGNETIC INTERACTIONS</u>. L. Kramer, Presiding
- A. Bruell (MIT), "Medium Dependence of the Ratio of the Longitudinal and Transverse Responses in Deep Inelastic Scattering"

- R. Gilman (Rutgers Univ. / JLab), "Polarization in Photo-Disintegration of the Deuteron"
- R. Holt (Argonne National Laboratory), "Two-Body Photodisintegration of the Deuteron at High Energy"
- J. W. Price (UCLA), "Photoproduction of the  $\Xi$  Hyperons"

10:45 Sunday, Renaissance (DAP/DNP)

H4. THE ORIGIN OF THE ELEMENTS

S. Austin, Presiding

- M. Wiescher (Univ. Notre Dame), "Nuclear Reaction Cycles in Nova Nucleosynthesis"
- A. Heger (UC Santa Cruz), "Stellar Evolution and Nucleosynthesis"
- R. Diehl (MPI fuer Extraterrestrische Physik), "Radioactivity Gamma-Rays from Galactic Nucleosynthesis Sites"
- D. Hartmann (Clemson Univ.), "Chemical Evolution of Galaxies and the Universe"
- 10:45 Sunday, Congressional A (DNP)
- H7. <u>MINISYMPOSIUM: EARLY RESULTS FROM</u> <u>RHIC – PROBING MATTER AT EXTREME</u> <u>DENSITY</u> V. Greene, Presiding
- X-N. Wang (Lawrence Berkeley National Laboratory), "Toward a Theoretical Understanding of High-Energy Heavy-Ion Collisions"
- 10:45 Sunday, Congressional B (DNP)
- H8. <u>MINISYMPOSIUM: NUCLEAR MEDIUM EFFECTS</u> IN He
  - J-P. Chen, Presiding

- W. Gloeckle (Ruhr Univ. Bochum), "Extraction of Neutron Information with Polarized <sup>3</sup>He"
- 14:30 Sunday, Grand Ballroom South (DPF/DNP)
- J2. PROGRESS IN NEUTRINO PHYSICS
  - R. G. H. Robertson, Presiding
- C. Walter (Boston Univ.), "Atmospheric Neutrino Oscillations: Results from Super-K and K2K"
- K. T. Lesko (Lawrence Berkeley National Laboratory), "Results from the Sudbury Neutrino Observatory"
- P. Vogel (Caltech), "Direct Determination of Neutrino Mass"
- J. Conrad (Columbia Univ.), "*ve* or not *ve*? (and other high  $\Delta m^2$ Questions"
- W. Haxton (INT, Univ. Washington), "Neutrinos and Nuclear Astrophysics"
- 14:30 Monday, Renaissance (DNP/GFB)
- J4. <u>UNSOLVED PROBLEMS IN THE FEW-NUCLEON</u> <u>CONTINUUM</u>
  - W. Tornow, Presiding
- G. Payne (Univ. Iowa), "Nuclear Three-Body Scattering: Progress and Problems"
- C. R. Brune (UNC-Chapel Hill / TUNL), "The Nuclear Three-Body Continuum"
- H. Weller (Duke Univ. / TUNL), "Open Problems in Radiative Capture Studies of A=4 Nuclei"
- A. C. Fonseca (Univ. Lisbon), "Four-Nucleon Scattering: Challenges and Opportunities"
- 10:45 Monday, Grand Ballroom South (DNP)
- Q2. <u>CHIRAL DYNAMICS</u>
- B. Holstein, Presiding
- Speaker to be announced H. Feshbach Memorial Lecture
- U-G. Meissner (FZ Juelich), "Chiral Dynamics"
- M. Zeller (Yale Univ.), "New Measurements of the Properties of K<sup>+</sup> e4 Decays"
- M. Pavan (TRIUMF), "Recent Progress in Experiment π-N Chiral Dynamics"
- J-W. Chen (Univ. Maryland), "Effective Field Theory in Nuclear Astrophysics"

10:45 Monday, 12/13 (DNP)

- Q13. <u>MINISYMPOSIUM: ULTRACOLD NEUTRONS</u> F. Wietfeldt, Presiding
- S. Lamoreaux (Los Alamos National Laboratory), "The Physics of Ultracold Neutrons and their Production"
- 14:30 Monday, Grand Ballroom South (DNP)
- S2. <u>DIVISION OF NUCLEAR PHYSICS PRIZE</u> <u>SESSION</u> J. M. Moss, Presiding
- R. Geller (INS, Grenoble), 2001 Tom W. Bonner Prize in Nuclear Physics – Invited Speech
- C. Lyneis (Lawrence Berkeley National Laboratory), "ECR Ion Sources for Heavy-Ion Nuclear Physics"
- D. W. Bardayan (Oak Ridge National Laboratory), "Explosive  ${}^{17}F(p,\gamma){}^{18}Ne$  Burning through the 3<sup>+</sup> State in  ${}^{18}Ne$ "
- G. Brown (SUNY, Stony Brook), Bethe Prize Talk
- W. F. Henning (GSI), "The Year in Nuclear Physics"

08:00 Tuesday, Grand Ballroom South (DNP)

V2. <u>NUCLEAR STRUCTURE AT THE LIMITS OF</u> <u>STABILITY</u>

J. Cizewski, Presiding

- W. Catford, "Study of the  ${}^{11}\text{B}(p,d){}^{10}\text{Be}$  Reaction and Prospects for Nucleon Transfer Studies with Radioactive Beams"
- A. Aprahamian (Univ. Notre Dame), "Nuclear Masses and Nucleosynthesis in the Universe"
- W. F. Mueller (Univ. Leuven), "The Nuclear Structure above N-40 in Co, Ni, and Cu Nuclei Produced in Resonant-Laser Ion Sources"
- R. Smolánczuk (Soltan Institute for Nuclear Studies), "The Production and Stability of the Heaviest Elements"
- 11:00 Tuesday, Renaissance East (DNP/DPF)
- W3. <u>NEW HORIZONS IN QCD</u> P. Paul, Presiding
- F. Wilczek (Princeton Univ.), "QCD in Extreme Conditions"
- A. Caldwell (Columbia Univ.), "Aspects of HERA Physics"
- P. MacKenzie, "Future of Lattice QCD"
- N. Makins, "The Structure of the Nucleon"
- J. Bjorken (SLAC), "Issues in Hadron Physics"

#### R. G. HAMISH ROBERTSON Chair

JOEL M. MOSS Chair-Elect

Department of Physics University of Washington Box 351560 Seattle, WA 98155 Phone: (206) 616-2745 Fax: (206) 616-2902 rghr@u.washington.edu Chair-Elect Physics Division Los Alamos National Laboratory P-25, MS H846 Los Alamos, NM 87545 Phone: (505) 667-1029 Fax: (505) 665-7920 jmm@lanl.gov

## CHARLES GLASHAUSSER

Vice-Chair Department of Physics Rutgers University 136 Frelinghaysen Road Piscataway, NJ 08854-8019 Phone: (732) 445-2526 Fax: (732) 445-4343 glashaus@physics.rutgers.edu

#### BENJAMIN F. GIBSON Secretary-Treasurer

DNP, MS B283 Los Alamos National Laboratory Los Alamos, NM 87545 Phone: (505) 667-5059 Fax: (505) 667-1931 dnp@qmc.lanl.gov