

#### Division of Nuclear Physics

The American Physical Society

# Newsletter No. 183 February 2015

TO: Members of the Division of Nuclear Physics, APS

FROM: Benjamin F. Gibson, LANL - Secretary-Treasurer, DNP

#### Future Deadlines

- 20 February 2015 APR15 Early Registration
- 1 March 2015 Mentor & Service Award Nominations
- 20 March 2015 APR15 Housing Reservation
- 1 May 2015 DNP Nominations for APS Fellowship

The home page for the Division of Nuclear Physics is now available at "http://dnp.aps.org." 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 Michael Thoennessen at <thoennessen@nscl.msu.edu>

# 1. RESULTS OF ELECTION: OFFICERS AND EXECUTIVE COMMITTEE FOR 2015

By the deadline date of 20 January 2015, 679 web ballots or properly identified paper ballots were cast in the election of officers and members of the Executive Committee and Division Councilor. The results of the election are as follows: Michael Thoennessen was elected as Vice-Chair and Benjamin F. Gibson was elected as Secretary-Treasurer for one-year terms. Mary Alberg, Rolf Ent, and Roxanne Springer were elected to two-year terms on the Executive Committee. The counting of the paper ballots was done by Kay Grady, of LANL. The members of the 2015 Executive Committee, who assume their duties at the APS April Meeting in Baltimore, are as follows:

John F. Wilkerson, Univ. of North Carolina, Chair (2015)
Gordon Cates, Univ. of Virginia, Chair-Elect (2015)
Michael Thoennessen, Michigan State Univ., Vice-Chair (2015)
Ani Aprahamian, Univ. of Notre Dame, Past Chair (2015)
Benjamin F. Gibson, LANL, Sec.-Trea. (2015)
Wick C. Haxton, Univ. of Calif., Div. Coun. (Dec. 2018)
Mary Alberg, Seattle Univ. (2016)
Rolf Ent, JLab. (2016)
Ronald Gilman, Rutgers Univ. (2015)
Filomena Nunes, Michigan State Univ. (2015)
Martin Savage, Univ. of Washington (2015)
Roxanne Springer, Duke Univ. (2016)

The DNP wishes to thank each of the members who agreed to stand for election. The DNP depends entirely on volunteers to carry out the business of the Division.

#### 2. CALL FOR DNP COMMITTEE SUGGESTIONS

The terms of some of the members of the following DNP committees expire in April 2015: Dissertation, Fellowship, Nominating, Home Page, Education, and Mentoring. Suggestions from the DNP

membership for new members of these committees as well as the APS Bethe, Bonner, and Feshbach Prize Committees are welcome and should be sent to John Wilkerson. A list of committee members for 2015/16 will be published in the August newsletter.

#### 3. NSAC NEWS

The Nuclear Science Advisory Committee (NSAC) will next meet in April of 2015. The date is not set.

The URL at which one can find a list of the NSAC members is http://science.energy.gov/np/nsac/members/.

More generally one can visit the NSAC website

http://science.energy.gov/np/nsac/

to learn about recent meetings and to register to watch the NSAC meetings via webcast.

#### 4. NEW DNP FELLOWS

The following DNP members are newly elected (2014) Fellows of the APS. Please join us in offering congratulations.

Alberg, Mary, Seattle University

Asner, David M., Pacific Northwest National Laboratory

Bass, Steffen A., Duke University

Deshpande, Abhay L., State University of New York, Stony Brook

Espy, Michelle A., Los Alamos National Laboratory

Harris, Deborah A., Fermilab

Hussein, Mahir S., University of Sao Paulo

Keane, Declan F., Kent State University

Lee, Dean J., North Carolina State University

Marcucci, Laura E., University of Pisa

Morningstar, Colin, Carnegie Mellon University

Papenbrock, Thomas F., University of Tennessee

Pennington, Michael R., Jefferson Laboratory

Poon, Alan W.P., Lawrence Berkeley National Laboratory

Rapp, Ralf F., Texas A&M University

Schumacher, Reinhard A., Carnegie Mellon University

Stepanyan, Stepan, Jefferson Laboratory

Tostevin, Jeffrey A., University of Surrey

Velkovska, Julia A., Vanderbilt University

Yuan, Feng, Lawrence Berkeley National Laboratory

- Call for Fellows Nominations
- 2014 CEU Program
- APR15 in Baltimore, MD
  - DNP15 in Santa Fe, NM



#### 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," or can be found under Fellowships on the APS Home Page. Only web nominations are accepted. The total number of members who may be elected to Fellowship in a given year is one half of one percent of the total APS membership.

The DNP deadline is 1 May. Nomination instructions can be found on the APS home page (http://www.aps.org); link to "Fellowships" under the heading "Programs".

The 2014 DNP Fellowship Committee is comprised of B. Mueller (Chair), A. Champagne, S. A. Page, G. A. Miller, and J. A. Cizewski. The Fellowship Committee reviews the nominations for APS Fellowship referred to the DNP and recommends a slate of candidates, which is forwarded to the APS Fellowship Committee and then to the APS Council for approval. Nominations remain active for two years.

It is important for nominators to ensure that the cases that 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 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 held during the APS April Meeting.

#### 6. CEU PROGRAM AT HAW14, W. Rogers

The seventeenth annual Conference Experience for Undergraduates was held in conjunction with Hawaii 2014 and included 123 U.S. undergraduate students and 10 Japanese undergraduate students. During this "capstone" conference experience, students presented their research to the larger professional community and to one another in a well attended Friday afternoon poster session. Additionally students were able to meet with faculty and senior scientists from graduate institutions about graduate school opportunities at a Graduate School Fair. Special CEU nuclear physics seminars were presented on Thursday (Rebecca Surman), Friday (Takashi Nakamura), and Saturday (Jolie Cizewski) mornings. Details of CEU14 can be found at <a href="http://physics.westmont.edu/ceu/">http://physics.westmont.edu/ceu/</a>. A roster of the CEU students will be published in the next DNP newsletter.

The CEU 2014 program thanks the following organizations for support: the Division of Nuclear Physics of the American Physical Society, the Physical Society of Japan, the National Science Foundation, and the Department of Energy through the following Laboratories: Argonne National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and Thomas Jefferson National Accelerator Facility, and the following Japanese organizations: Nuclear Physics Forum of Japan, the Nuclear Theory Group of Japan, and Yukawa Institute for Theoretical Physics.

#### 7. APS MEETING IN BALTIMORE, MD, APRIL 11 – 14 2015

The APS April Meeting is heading to Baltimore, Maryland! This meeting will bring together physicists and students in astrophysics, gravitational physics, nuclear physics, and particle physics to share new research and insights at sessions sponsored by sixteen units of the APS:

#### Divisions

- \* Astrophysics (DAP)
- \* Computational Physics (DCOMP)
- \* Nuclear Physics (DNP)
- \* Particles and Fields (DPF)
- \* Physics of Beams (DPB)

#### Forums

- \* Education (FEd)
- \* Graduate Student Affairs (FGSA)
- \* History of Physics (FHP)
- \* International Physics (FIP)
- \* Physics and Society (FPS)
- \* Outreach and Engaging the Public (FOEP)

#### **Topical Groups**

- \* Energy Research and Applications (GERA)
- \* Few-Body Systems (GFB)
- \* Gravitation (GGR)
- \* Hadronic Physics (GHP)
- \* Instrument & Measurement Science (GIMS)
- \* Physics Education Research (GPER)
- \* Physics of Climate (GPC)
- \* Precision Measurement & Fundamental Constants (GPMFC)

The April meeting will offer an outstanding scientific program of three plenary sessions (9 plenary talks), 75 invited sessions. and more than 100 contributed paper sessions. Note the deadlines:

o 20 February Early Registration
o 2 March Housing Reservations
o 20 March Online Registration closes

#### 8. DNP APRIL 2015 MEETING PROGRAM

The DNP Program Committee, under the leadership of Program Committee Chair John Wilkerson, has planned a full nuclear physics program for the Spring Meeting. In addition, there will be general plenary sessions on three of the four days during the meeting, 11-14 April. The on-line BAPS program will be available for viewing in February.

Joint sessions have been arranged with the Forum on Physics in Society, the Division of Particles & Fields, the Division of Astrophysics, the Topical Group on Hadron Physics, the Topical Group on Few-Body Physics, the Division of Physics of Beams, the Topical Group on Gravitation, and the Topical Group on Precision Measurements.

DNP stand-alone sessions will include the Bonner and Feshbach Prize Session. Six topic DNP stand alone sessions will include:

"The Structure of the Pion" (organized by V. Burkert and S. Capstick), "Astrophysical Reaction Rates via Charge-exchange and Transfer Techniques" (organized by R. Surman, A. Spyrou, and J. Cizewski), "Hard Probes in pA Collisions," (organized by A. Sickles and H. Caines), "Nuclear Structure of Rare Isotopes" (organized by J. Nolen and D. Radford), "Neutrino Mass" (organized by S. Elliott and J. Wilkerson).

The DNP component of the meeting was organized by sorters Volker Burkert, Ben Gibson, Pieter Mumm, Jerry Nolen, and Igor Strakovsky, led by DNP Program Chair John Wilkerson and Vice Chair Gordon Cates.

#### 8. FUTURE APS SPRING MEETING INFORMATION

2016 Apr 16 – 19 Salt Lake City, UT

Any comments/suggestions should be sent to APS Director of Meetings, Terri Gaier (gaier@aps.org).

# 9. 2014 JOINT MEETING ON HAWAII WITH THE PHYSICAL SOCIETY OF JAPAN, T. Otsuka and R. Milner

This five-day meeting took place on the 62 ocean-front acres of the Hilton Waikoloa Village on the Big Island of Hawaii on 7-11 October 2014. Hawaii 2014 (HAW14) extended the highly successful series of joint meetings in Hawaii that originated in 2001, and continued in 2005 and 2009. These important meetings serve to foster cooperation, collaboration, and the exchange of ideas among nuclear physicists from Japan and the U.S., plus those from other Pacific Rim countries. Further, they provide an unusual opportunity for students from Japan and the U.S. to meet, interact, and discuss their visions of careers in nuclear physics. HAW14 attracted about 1150 registrants, of which about the two thirds were from the U.S. and about one third were from Japan.

HAW14 opened on Tuesday, 7 October, with ten workshops that attracted more than 600 participants. The subjects of the workshops spanned the research frontiers across the entire field of nuclear physics and included approximately 120 speakers. On Tuesday evening all conference attendees gathered for a welcome reception, where many old friends and colleagues from both countries met.

On Wednesday morning, formal meeting activities began with a plenary session that highlighted some important activities and issues of current interest to nuclear physicists in Japan and the U.S. The major impact of the highly successful RIKEN-BNL Research Center, a model for international collaboration, was described by Nicholas Samios. Hiroyoshi Sakurai presented the exciting science being carried out at the world-leading radioactive beam facility RIBF in Japan. Robert McKeown provided an overview of the recent discoveries and future prospects in electroweak nuclear physics. Naoto Sekimura, who is a nuclear engineering professor of the University of Tokyo, closed the plenary session with a presentation on the accident report of the Atomic Energy Society of Japan on the Fukushima Daiichi accident.

The 70 parallel sessions of the HAW14 meeting took place from Wednesday evening through Saturday afternoon. There were 31 minisymposia and 39 contributed paper sessions at HAW14. The subjects covered all areas of experimental and theoretical nuclear physics. The parallel sessions took place in the morning and evening to allow the afternoons free for other activities such as community meetings.

The Committee on the Status of Women in Physics and the Physical Society of Japan hosted a standing room-only panel session on Wednesday afternoon with several speakers from both countries. This was organized by Sherry Yennello and Atsuko Odawara. The 17<sup>th</sup> annual Conference Experience for Undergraduates (CEU) program was organized by Warren Rogers and Takashi Nakamura, and the 133 undergraduate participants, including 10 from Japan, presented research in a very crowded poster session on Friday afternoon. The HAW14 Luau on Friday evening drew more than 600 in attendance. On Saturday afternoon, representatives of universities hosted an informal

graduate school information session for interested students attending HAW14.

The program for HAW14 was organized by the DNP/JPS Program Committee under the chairmanship of John Wilkerson. The workshops were organized by Ani Aprahamian and Hirokazu Tamura of the HAW14 Organizing Committee.

#### 10. FUTURE DNP FALL MEETINGS

2016 October 12 – 15 Vancover, BC

The dates include the premeeting 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. 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.

# 11. 2015 NATIONAL NUCLEAR PHYSICS SUMMER SCHOOL, R. Soltz

The 2015 National Nuclear Physics Summer School (NNPSS) will be held from 15 June through 25 June 2015, at the Granlibakken Resort near Lake Tahoe. The summer school is open to graduate students and postdocs within a few years of their PhD (on either side). Lecturers will provide pedagogical reviews and discuss future prospects covering the full range of topics in experimental and theoretical nuclear physics. Additional seminars on special topics and applications will also be

Additional seminars on special topics and applications will also be given. The full set of topics, lecturers, schedule, and application instructions are available through the following website:

http://nnpss2015.llnl.gov .

Additional information is available through the INT website: http://www.int.washington.edu/NNPSS.

The school can accommodate 50 applicants. Applications and reference letters can be submitted until 15 April 2015. For accepted applicants, the school will cover most local expenses. Participants are responsible for travel costs and extracurricular expenses.

Inquiries should be sent to <nnpss2015@llnl.gov>. The school is being organized by Ron Soltz and Mani Tripathi (co-chairs), Dan Cebra, Erich Ormand, Mark Stoyer, and Bob Svoboda.

# 12. 2016 NATIONAL NUCLEAR PHYSICS SUMMER SCHOOL SITE SOLICITATION, R. Perry

The 2015 National Nuclear Physics Summer School is organized by Lawrence Livermore National Laboratory, UC Davis and the National Nuclear Science and Security Consortium led by UC Berkeley. (See item #11). The NNPSS Steering Committee now invites applications from potential hosts for the 2016 NNPSS. The school is sponsored by the National Science Foundation, the US Dept. of Energy, and the Institute of Nuclear Theory at the University of Washington. Information for potential hosts is available from the website

http://www.int.washington.edu/NNPSS.

Potential applicants are encouraged to contact Robert Perry <perry.6@osu.edu>, Chair of the NNPSS Steering Committee,
regarding questions or to express interest in hosting the 2016 school or
to express interest in hosting a future school. Applications should be
received by 24 March 2015.

#### 13. PHYSICAL REVIEW NEWS, C. Wesselborg

Five new "Physical Review C" Editorial Board members were appointed to three year terms beging 1 January 2015 by the "Physical Review" Editor-in-Chief, Gene Sprouse:

Sanjay Reddy
University of Washington
Reinhard Schumacher
Carnegie Mellon University
Hirokazu Tamura
Tohoku University
Ubirajara van Kolck
University of Arizona
And IPN, ORSAY
Remco Zegers
Michigan State University

On behalf of the nuclear physics community, the PRC editors thank the departing Editorial Board members for their service: J. Arrington, C. R. Howell, T. Nagae, B. Saghai, and M. J. Savage

#### 14. 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. Despite being computer literate authors — more than 90% 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 95% of the DNP members do have an e-mail address listed with the APS, all are not current. Is yours?

Membership information can be updated by sending an e-mail message to "membership@aps.org" or directly on the Web. Log on to the directory with your password and click on Add/Modify to change your information.

# 15. ANNUAL REVIEWS OF NUCLEAR AND PARTICLE SCIENCE

Ordering Procedure: Orders should be sent directly to: Annual Reviews, Attn: Clarette Tupper, Customer Service, 4139 El Camino Way, P. O. Box 10139, Palo Alto, CA 94303-0139 (e-mail: ctupper@annualreviews.org). DNP membership that entitles one to the DNP discount will be verified through the DNP prior to shipment of orders.

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 <a href="http://www.AnnualReviews.org">http://www.AnnualReviews.org</a>. The Web Site also features a fully searchable abstracts database for all Annual Reviews publications, which allows visitors to search by author name or key words.

#### 16. FUTURE CONFERENCES

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

# "21st International IUPAP Conference on Few-Body Problems in Physics" (FB21)

Chicago IL, 18-22 May 2015

Co-Chairs: C.D. Roberts, Ch. Elster, D.R. Phillips

URL: www.fewbody21.us

#### "2015 Gordon Conference on Nuclear Chemistry: Confluence of Nuclear Structure and Reactions"

Colby-Sawyer College, New London, NH, 31 May - 5 June 2015

URL: <a href="https://www.grc.org/programs.aspx?id=11762">www.grc.org/programs.aspx?id=11762</a>

# 7th International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions (Hard Probes 2015)

Montreal, Quebec, Canada, 29 June - 3 July 2015

Contacts: Sangyong Jeon (Chair) and Charles Gale (Co-Chair)

URL: http://www.physics.mcgill.ca/hp2015

#### "8th International Workshop on Chiral Dynamics" (CD2015)

Pisa, Italy, 29 June - 3 July 2015

Co-Chairs: Laura Marcucci and Michele Viviani

Contact: <a href="mailto:cd2015@pi.infn.it">cd2015@pi.infn.it</a>
URL: <a href="mailto:agenda.infn.it/event/cd2015">agenda.infn.it/event/cd2015</a>

# 15th International Conference on Strangeness in Quak Matter (SQM2015)

Dubna, Russia, 6-11 July 2015

Contacts: David Blaschke and Alexander Sorin

URL: <a href="http://sqm.jinr.ru/">http://sqm.jinr.ru/</a>

#### 25th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2015)

Kobe, Japan, 27 September - 3 October 2015

Contacts: Hideki Hamagaki (Chair), Yasuyuki Akiba (Co-

Chair), Tetsuo Hatsuda (Co-Chair) URL: http://qm2015.riken.jp

### 5th International Conference on Nuclear Fragmentation (NUFRA2015)

Kemer, Antalya, Turkey, 4-11 October 2015 Contact: nufra2015@fias.uni-frankfurt.de

#### "Int'l Conference on Nuclear Physics" (INPC2016)

Adelaide, Australia, 11-16 September 2016

Contact: A. W. Thomas

URL: www.physics.adelaide.edu/cssm/workshops/inpc2016

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