## Newsletter No. 200 May 2019

TO: Members of the Division of Nuclear Physics, APS Ken Hicks, Ohio U. – Secretary-Treasurer, DNP FROM:

#### ACCOMPANYING THIS NEWSLETTER:

• DNP 2019 meeting poster

#### Future Deadlines

• 3 June 2019 — Nominations for Bethe Prize

• 3 June 2019 — Nominations for Bonner Prize

• 3 June 2019 — Nominations for Feshbach Prize

• 3 June 2019 — Nominations for Dissertation Award

• 1 July 2019 — DNP19 Meeting Abstract Submission

• 1 July 2019 — Election Nominations

The home page for the Division of Nuclear Physics is available at "http://dnp.aps.org." Information of interest to DNP members nominations, prizes, meeting deadlines, etc. are provided. Each DNP Newsletter is posted online. Comments and suggestions are solicited. Please send them to Renee Fatemi at rhfate2@g.uky.edu.

#### **DNP COMMITTEES**

#### Executive Committee

Robert V.F. Janssens, Univ. of N. Carolina, Chair (2019) Krishna S. Kumar, Univ. Mass. Amherst, Chair-Elect (2019) Sherry J. Yennello, Texas A&M Univ., Vice-Chair (2019) David J. Dean, ORNL, Past-Chair (2019) Kenneth H. Hicks, Ohio U., Sec.-Treas. (2019)

A. Baha Balantekin, Univ. of Wisc., Div. Coun. (2021)

Jeffery C. Blackmon, LSU (2020)

Renee H. Fatemi, Univ. of Kentucky (2019)

Nadia Fomin, Univ. of Tennessee (2020)

Spencer R. Klein, LBNL (2019)

Julie Roche, Ohio University (2020)

Ramona L. Vogt, LLNL (2019)

### Program Committee

Krishna S. Kumar, Univ. Mass. Amherst, Chair (2019)

Sherry J. Yennello, Texas A&M Univ., Vice-Chair (2019)

David J. Dean, ORNL, Past-Chair (2019)

Kenneth H. Hicks, Ohio U., Sec.-Trea. (2019)

Bill Briscoe, George Washington U. (2019)

Vince Cirigliano, LANL (2020)

Catherine Deibel, LSU (2020)

Nadia Fomin, Univ. of Tennessee (2019)

Alfredo Galindo-Uribarri, ORNL (2019)

Greg Hackman, TRIUMF (2019)

Anna Hayes-Sterbenz, LANL (2020)

Mike Heffner, LLNL (2020)

Or Hen, M.I.T. (2019)

Kent Paschke, U. of Virginia (2020)

Christine Nattrass, U. of Tennessee (2020)

Seamus Riordan, ANL (2020)

Andrew Rogers, Univ. of Mass. Lowell (2019)

Phiala Shanahan, Coll. of William & Mary (2019) Ernst Sichtermann, LBNL (2020) Derek Teaney, SUNY Stony Brook (2020) Christopher Wrede, MSU (2019)

Other DNP committees will appear in the August Newsletter.

## 2019 NOMINATIONS FOR OFFICERS AND EXECUTIVE COMMITTEE

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 2020 April meeting in Washington, DC. Krishna Kumar will become Chair, Sherry Yennello will become Chair-Elect, and Jeffery Blackman, Nadia Fomin, and Julie Roche will remain members of the Executive Committee, as will Robert Jannsens as Past Chair. A Vice-Chair, Secretary-Treasurer, and three members of the Executive Committee are to be elected.

The nominating ballot will be on-line only. (No paper nominating ballot will be sent to the membership.) The nominating ballot will be available from mid May until 1 July. The DNP Bylaws require that a nominee proposed for a given office by not fewer than 2% of the members (52 for this election) shall be deemed nominated for that position. Nominees proposed by at least 20 members will be given strong consideration by the Nominating Committee.

If you are a DNP member, please exercise your right to nominate candidates for the upcoming DNP elections. In 2018 there were 155 nomination forms received. In January 2019 only 754 of 2600+ members voted. It is important to vote!

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## CALL FOR PRIZE/AWARD NOMINATIONS

## NOMINATIONS FOR THE 2020 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 (since 2001) are: R. Geller and C. Lyneis, J. D. Bowman, A. B. McDonald, G. F. Bertsch, R. J. Holt, J. C. Hardy and I.S. Towner, S. J. Freedman, A. M. Pozkanzer, R. D. McKeown, S. C. Pieper and R. B. Wiringa, R. F. Casten, W. Nazarewicz, M. K. Moe, W. A. Zajc, M. Gyulassy and H. Weiman, I-Y. Lee, C. F. Perdrisat, B. M. Sherrill, and B.V. Jacak.

The purpose of this prize, which currently consists of \$10,000 and a certificate citing the recipient's contributions, is "To recognize and encourage outstanding experimental research in nuclear physics, including the development of a method, technique, or device that significantly contributes in a general way to nuclear physics research."

Nominations are open to physicists whose work in nuclear physics is primarily experimental. 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 contributions. While general statements concerning the value of the nominee's work are important, specific information that allows the committee to determine what the nominee has contributed and how these contributions have impacted the field are crucial. See the APS web site.

Submit name of proposed candidate and supporting material before *3 June 2019* to the APS via web submission.

## 4. NOMINATIONS FOR THE 2020 HANS A. 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, G. E. Brown, M. C. T. Wiescher, W. C. Haxton, S. E. Woosley, A. G. W. Cameron, J. R. Wilson, F. K. Thielemann, D. Arnett, C. Rolfs, C. J. Pethick, M. Peimbert and S. Torres-Peimbert, G. M. Fuller, K. L. Kratz, J Lattimer, V. Kalogera, S. L. Shapiro, K. A. Olive, and K. Nomoto.

The purpose of the prize, which currently consists of \$10,000 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 contributions. While general statements concerning the value of the nominee's work are important, specific information defining what the nominee has contributed and how these contributions have impacted the field is needed. See the APS web site.

Submit name of proposed candidate and supporting material before *3 June 2019* to the APS via web submission.

## 5. NOMINATIONS FOR THE 2020 HERMAN FESHBACH PRIZE IN NUCLEAR PHYSICS

This prize was established in 2013 by friends, students, and associates of Herman Feshbach. Previous prize winners are: J. W. Negele, L. McLerran, X. Ji, J. A. Carlson, E. Shuryak, and B. R. Holstein.

The purpose of the prize, which currently consists of \$10,000 and a certificate citing the recipients contributions, is "To recognize and encourage outstanding research in theoretical nuclear physics".

Nominations are open to physicists whose work in nuclear physics is primarily theoretical. There are no time limitations on when the work described in the citation was performed. The prize shall be awarded to one person, or it may be shared by up to and including three persons when all the recipients have contributed equally to the same accomplishment.

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 in evaluating the nominee's contribution. While general statements concerning the value of the nominee's work are useful, specific information helps the committee to determine what the nominee has contributed and how these contributions have impacted the field. See the APS web site.

Submit name of the proposed candidate and supporting material before *3 June 2019* to the APS via web submission.

## 6. NOMINATIONS FOR THE 2019 STUART J. FREEDMAN AWARD IN EXPERIMENTAL NUCLEAR PHYSICS

This award was established in 2018 by family, friends, and associates of Stuart Jay Freedman to recognize an early career experimentalist in Nuclear physics. Previous winners are: Ania Kwiatkowski.

Nominations are open to experimental nuclear physicists who are within seven years of their Ph.D. (at the time of the submission deadline for the nomination, excluding career interruptions). The prize shall normally be awarded to one person. Nominations remain active for two award cycles. The current award amount is \$3,500.

The deadline for nominations of the current cycle of the Freeman award has already passed. Future nominations for the 2020 award can be submitted with the name of the proposed candidate and supporting material before *April 2020* via the APS web submission.

### 7. NOMINATIONS FOR THE 2020 DISSERTATION AWARD IN NUCLEAR PHYSICS

The annual award, 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. M. Sherrill and W. J. Burger, T. E. Cowan, M. J. Musolf, J. E. Koster, Z. Zhao, G. Schmid, Y. G. Kolomensky, E. Hawker, J. R. Arrington, D. Bardayan, J-W. Chen, K. Heeger, A. Steiner, A. Kurylov, L-B. Wang, K. Miknaitis and M. Djordjevic, N. Tolich and D. Choudhury, S. Clayton and Th. Banks, C. R. Hoffman, and H. Song and M. Luzum, E. Mereghetti and P. Barbeau, G. Shen, K. Myers, M. P. Menenhall, C. Shen, J. L. Ouellet, K. W. Brown and M. E. Caplan, and G. Rich.

Nature: The award consists of \$2500 and an allowance for travel to the annual Fall Meeting of the Division of Nuclear Physics of the American Physical Society at which the award will be presented.

Rules and Eligibility: Nominations are open to any person who has received a Ph.D. degree in experimental or theoretical nuclear physics from a North American university within the two-year period preceding 1 June 2018. See the APS web site.

Submit before *3 June 2019* 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 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: Robert Janssens (see the address at the bottom of this newsletter).

#### 8. FUTURE DNP FALL MEETINGS

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 Committee 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.

2019	14-17 October	Crystal City, VA
2020	October	New Orleans, LA

#### 9. FUTURE APS SPRING MEETING INFORMATION

2020	18-21 April	Washington, DC
2021	17-20 April	Sacremento, CA

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

## 10. DNP 2019 FALL MEETING IN CRYSTAL CITY, VA

The Annual Fall Meeting of the Division of Nuclear Physics of the American Physical Society will be held in Crystal City, VA, 14-17 October. The meeting will run from **Monday through Thursday** at 1 pm. Topical workshops will be held on Monday morning, followed by the opening plenary session on Monday afternoon, starting at 3:00 p.m. A reception will be held starting immediately following the plenary session. Parallel scientific sessions — invited speaker sessions, minisymposia, and contributed sessions — will be held Tuesday and Wednesday, both morning and afternoon, as well as on Thursday morning. The CEU poster session as well as the Physical Review Meetthe-Editors Drop-In reception will be scheduled in the early afternoon time slot on Tuesday. The Business/Town Meeting will be Wednesday afternoon in the late time slot. A Graduate Student Pizza Social will be held at Bertucci's Brick Oven Pizza & Pasta (near the GWU campus) on Tuesday evening.

The meeting will be held in the **Crystal Gateway Marriott** hotel (**not to be confused** with the Crystal City Marriott!). All functions will be in the Crystal Gateway Marriott located on Jefferson Davis Highway in Arlington, VA. Crystal City is an urban neighborhood in the eastern part of Arlington, Virginia. It is located inside the I-495 beltway. The Crystal Gateway is a 5-10 minute ride by subway (the Metro) from the

Reagan Washington National Airport and about 30 minutes by Metro from the Washington Dulles International Airport. There are many wonderful off-site shops and restaurants within walking distance. The Local Organizing Committee is chaired by Bill Briscoe (GWU), working with: Evie Downie (GWU), Michael Doring (GWU), Gerry Feldman (GWU), Harald Griesshammer (GWU), Maxim Mai (GWU),Nawal Benmouna (Montgomery College), Tanja Horn (CUA), Latifa Elouadrhiri (JLab), Thomas Cohen (UMD).

The Local Organizing Committee (LOC) has arranged three workshops for Monday morning, intended as didactic introductions to the given topics. The workshops are entitled: (1) "The nuclear equation of state in the era of gravitational waves", organized by L. Elouadrhiri and H. Griesshammer, (2) "Physics opportunities with the EIC", organized by Tanja Horn, and (3) "New data analysis methods", organized by H. Griesshammer and M. Doering. In addition, the LOC has arranged for banquet speaker **Sylvester James Gates**, who is well-known for his role on President Obama's Council of Advisors on Science and Technology, as well as being the current Vice-President of the APS.

The Program Committee, under the leadership of Krishna Kumar, has organized 6 invited sessions which will begin at 8:30 am on Tuesday morning and run through Thursday at 1:00 pm. The Plenary session will include talks on topics that span the field: (1) Quantum Computing for Nuclear Physics, (2) Short-range Correlations in Nuclei, (3) EDM Searches in Nuclei, Nucleons and Molecules, and (4) Tests of QCD at the EIC. The Program Committee has organized a number of high-interest invitied sessions:

- Nuclear Probes of Fundamental Symmetries
- Uncerstanding the Nuclear Interaction Across Scales
- Spin, Sea Quarks and Femtography
- Structure of Proton-Rich Nuclei
- Particles, Nuclei and Stars via Beta Decay
- Hydrodynamic Simulations of the QGP: Successes and Challenges

The session organized by the Local Organizing Committee is entitled "Alternative career paths for a nuclear physicist". An award session will include talks by the Nuclear Physics Dissertation Award winner and by the Mentoring Award winner.

There are 11 minisymposia planned for the Fall DNP meeting:

- Towards a US Electron Ion Collider: Physics, Accelerator, Detectors
- Quantitative Understanding of QGP Properties
- Search for the Critical Point
- Lattice QCD for PDFs
- Nuclear Physics and the r-Process in the Multi-Messenger Era
- Particle Emission and Exotic Nuclei
- Neutrino Properties and Interactions: Results, Challenges and Implications
- Electrodisintegration Constraints on Astrophysical Radiative Capture Rates
- Fundamental Symmetries: Experiment and Theory
- Excited State Lifetime Measurements for Nuclear Structure and Astrophysics
- Short Range Correlations and Bound Nucleon Structure Across Scales

If you want to submit a contributed talk that fits into one of these categories, be sure to find the proper sorting category when submitting your abstract from the APS website. Of course, the usual general nuclear physics sorting categories from the past will also be available for all contributed talks.

**ABSTRACTS**: The submissions of abstracts will open mid-May, 2019. **HOTEL**: Crystal Gateway Marriott, 1700 Jefferson Davis Highway, Arlington VA 22202. You must book your hotel through the meeting registration website to obtain the DNP special rate.

#### 11. DNP 2019 REGISTRATION AND HOTEL RESERVATIONS

Complete Conference Coordinators, Inc. (CCC) will handle the meeting registration and hotel reservations through a web site that is linked to the Meeting website. A special room rate for the meeting has been negotiated with the Crystal Gateway Marriott hotel, which serves as the meeting hotel for all sessions and special events. To obtain the conference rate, rooms must be reserved through the CCC website. The The contact information for CCC is

Complete Conference Coordinators, Inc.

Email: info@cccmeetings.com Tel: +1-630-416-3030

URL: http://www.cccmeetings.com

Registration will be through the CCC web site. Registration will open in mid May. A link will appear on the conference website and the opening will be announced by email.

The registration fee includes the workshop and plenary session coffee break, and coffee will be available Tuesday through Thursday in the morning until the end of the break between the morning parallel sessions. The companion's registration fee offsets in part the cost of coffee breaks, the companions' program on Monday afternoon, and reception on Monday evening following the plenary session.

A banquet will be held on Wednesday starting at 7 pm in the Marriott at an additional cost. Registration costs are outlined in the following table:

Registration Categories & Deadlines	Members	Non members	Students/ Unemployed	Postdoc Members	Companions
Early Registration (by September 1st)	\$315	\$600	\$125	\$175	. \$60
Late Reg. (Sept. 2 – October 8)	\$390	\$750	\$200	\$250	. \$75
On-site Registration	\$465	\$900	\$275	\$325	. \$100
Banquet Tickets (Advanced/On-Site)	\$70/\$85	\$70/\$85	\$70/\$85	\$70/\$85	\$70/\$85

#### 12. FUTURE MEETINGS

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

## "6th International Conference on Proton-Emitting Nuclei"

3-7 June 2019, East Lansing, MI

Contacts: Alex Brown

URL: https://indico.fnal.gov/event/17151/

Email: brown@nscl.msu.edu

# "15<sup>th</sup> International Conf. on Meson-Nucleon Physics and the Structure of the Nucleeon (MENU-2019)"

2-7 June 2019, CMU, Pittsburgh, PA

Contacts: Curtis Meyer and Reinhard Schumacher URL: https://events.mcs.cmu.edu/menu2019/ Email: mcs-menu-2019@andrew.cmu.edu

#### "12th International Workshop on the Physics of Excited Nucleons"

10-14 June 2019, Bonn University, Bonn, Germany Contacts: Reinhard Beck and Ulrike Thoma

URL: https://indico.cern.ch/event/739938/ Email: nstar2019info@lists.hiskp.uni-bonn.de

#### "2019 North American Particle Accelerator Conference"

1-6 September 2019, Lansing, MI Contacts: Yoshishige Yamazaki

URL: https://www.frib.msu.edu/events/2019/napac19/

Email: napac2019@frib.msu.edu

## "24th European Conference on Few-Body Problems in Physics"

2-6 September 2019, Univ. of Surrey, Guildford, UK

Contacts: Natasha Timofeyuk

URL: https://indico.cern.ch/event/789163/

Email: efb24@surrey.ac.uk

### "2020 Gordon Research Conference: Photonuclear Reactions"

9-14 August 2020, Holderness, NH

Contacts: Huey-Wen Lin and Douglas Higinbotham

URL: https://www.grc.org/photonuclear-reactions-conference/2020/

Email: hwlin@pa.msu.edu

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