



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

ACCOMPANYING THIS NEWSLETTER:

- Hawaii 2018 program information



Future Deadlines

- **1 June 2018** — Nominations for the Bethe Prize
- **1 June 2018** — Nominations for the Bonner Prize
- **1 June 2018** — Nominations for the Feshbach Prize
- **1 June 2018** — Nominations for the Freedman Award
- **1 June 2018** — Nominations for the Dissertation Award
- **1 July 2018** — HAW18 Meeting Abstract Submission
- **1 July 2018** — Election Nominations

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 online, along with the copy sent via post. Comments and suggestions are solicited. Please send them to John R. Arrington at [<johna@anl.gov>](mailto:johna@anl.gov)

1. DNP COMMITTEES

Executive Committee

David J. Dean, ORNL, Chair (2018)
Robert V.F. Janssens, Univ. of N. Carolina, Chair-Elect (2018)
Krishna S. Kumar, Stony Brook Univ., Vice-Chair (2018)
John F. Wilkerson, Univ. of N. Carolina, Past-Chair (2018)
Kenneth H. Hicks, Ohio Univ., Sec.-Trea. (2018)
A. Baha Balantekin, Univ. of Wisc., Div. Coun. (2021)
John R. Arrington, ANL (2018)
Renee Fatemi, Univ. of Kentucky (2019)
Spencer R. Klein, LBNL (2019)
Rebecca A. Surman, Univ. of Notre Dame (2018)
Remco G.T. Zegers, MSU (2018)
Ramona L. Vogt, LLNL (2019)

Program Committee

Robert V.F. Janssens, Univ. of N. Carolina, Chair (2018)
Krishna S. Kumar, Stony Brook Univ., Vice-Chair (2018)
David J. Dean, ORNL, Chair (2017)
John F. Wilkerson, Univ. of N. Carolina, Past-Chair (2016)
Kenneth H. Hicks, Ohio Univ., Sec.-Trea. (2018)
Christine Aidala, Univ. of Michigan, (2018)
John Engel, Univ. of N. Carolina (2018)
Nadia Fomin, Univ. of Tenn. (2019)
Benjamin F. Gibson, LANL (2018)
Greg Hackman, TRIUMF (2019)
Or Hen, M. I. T. (2019)
Daniel Kasen, Univ. of Calif. & LBNL (2018)
Benjamin Kay, ANL (2018)

Julie Roche, Ohio Univ. (2018)
Andrew Rogers, Univ. of Mass. Lowell (2019)
Phiala Shanahan, Coll. of William & Mary (2019)
Matthew Shepherd, Indiana Univ. (2018)
Alfredo Galindo-Uribarri, ORNL (2019)
Julia Velkovska, Vanderbilt Univ. (2018)
Christopher Wrede, MSU (2019)

Other DNP committees will appear in the August Newsletter.

2. 2018 NOMINATIONS FOR OFFICERS AND EXECUTIVE COMMITTEE

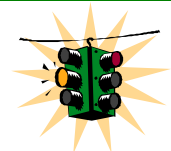
Terms of the officers and three members of the present Executive Committee will expire at the close of the regular meeting of the Division to be held in conjunction with the APS 2019 April meeting in Denver, CO. Robert Janssens will become Chair, Krishna Kumar will become Chair-Elect, and Renee Fatemi, Spencer Klein, and Ramona Vogt will remain members of the Executive Committee as will David Dean 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 (54 for this election) shall be deemed nominated for that position. Nominees, who are 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 2017 there were only 59 nomination forms received. More members do vote in the DNP elections, but in January 2017 only some 767 of 2700+ members voted. **It is important to vote!**

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- **Call for Prize/Award Nominations**
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CALL FOR PRIZE/AWARD NOMINATIONS

3. NOMINATIONS FOR THE 2019 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. Haerberli, R. M. Diamond and F. S. Stephens, B. L. Cohen, G. E. Brown, G. Baym, 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, 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, and B. M. Sherrill.

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 contribution. 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 this contribution has impacted the field are crucial. See the APS web site.

Submit name of proposed candidate and supporting material before **1 June 2018** to the APS via web submission.

4. NOMINATIONS FOR THE 2019 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, and K. A. Olive.

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 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. See the APS web site.

Submit name of proposed candidate and supporting material before **1 June 2018** to the APS via web submission.

5. NOMINATIONS FOR THE 2019 HERMAN FESHBACH PRIZE IN NUCLEAR PHYSICS

This prize was established in 2013 by friends, students, and associates of Herman Feshbach. Previous prize winners were John W. Negele, L. McLerran, X-d. Ji, J. A. Carlson, and E. Shuryak.

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 important, we must have specific information that allows us to determine what the nominee has contributed and how this contribution has impacted the field. See the APS web site.

Submit name of the proposed candidate and supporting material before **1 June 2018** to the APS via web submission.

6. NOMINATIONS FOR THE 2018 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.

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 monetary award is \$3000 plus travel allowance.

Submit name of the proposed candidate and supporting material before **1 June 2018** to the APS via web submission.

7. NOMINATIONS FOR THE 2019 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, H. Song and M. Luzum, E. Mereghetti and P. Barbeau, G. Shen, K. Myers, M. P. Menenhal, C. Shen, J. L. Ouellet, and K. W. Brown and M. E. Caplan.

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 **1 June 2018** 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: David J. Dean, Oak Ridge National Lab, Physics Division, P.O. Box 2008, Bldg 6000, MS 6369, Oak Ridge, TN 37831.

8. FUTURE DNP FALL MEETINGS

The dates include the pre-meeting 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.

2019	14-17 October	Crystal City, VA
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9. FUTURE APS SPRING MEETING INFORMATION

2019	13-16 April	Denver, CO
2020	18-21 April	Washington, DC
2021	17-20 April	Sacramento, CA

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

10. 2018 JOINT MEETING ON HAWAII WITH THE PHYSICAL SOCIETY OF JAPAN, B. F. Gibson

In October 2018, we will hold the fifth joint meeting of the Division of Nuclear Physics of the American Physical Society with the nuclear physicists of the Physical Society of Japan (JPS). The previous meetings in 2001, 2005, 2009, and 2014 were outstanding successes.

Hawaii 2018 will be held at the Hilton Waikoloa Village on Hawaii’s Big Island, 23-27 October, 2018. In addition to showcasing exciting nuclear physics, Hawaii 2018 is intended to foster cooperation, collaboration, and the exchange of ideas among the nuclear scientists from Japan, the U.S., and other Pacific Rim countries. It will provide an opportunity for students from Japan and the U.S. to meet and discuss their visions of careers in the field of nuclear physics.

Website:

<https://www.phy.ornl.gov/hawaii2018/>

Hotel:

The venue for this year’s joint meeting, the Hilton Waikaloa, is the same as for the 2014 meeting and is located some 18 miles north of the Kona International Airport. Complete Conference Coordinators, Inc. has negotiated the favorable government rate for sleeping rooms for the meeting. The resort is located on a 62 acre parcel on the ocean, has ample meeting space, and has a 4 acre lagoon for snorkeling and swimming with dolphins. It is near two shopping centers with several restaurants and a small food court. The venue is near Mauna Kea and the Keck and Subaru Observatories.

Meeting Format:

The meeting structure for Hawaii 2018 will resemble that of the previous joint meetings. Workshops will be held on Tuesday, 23 October, preceding the plenary and scientific sessions that follow on 24-27 October. The plenary session on Wednesday morning will open the main meeting and will highlight nuclear physics in Japan and the U.S. The following scientific sessions will be held during the morning and evening, except on the last day of the meeting (Saturday) when sessions will be scheduled in the morning and afternoon. There will be an Hawaiian Luau on Friday evening to celebrate the joint meeting.

Typically, a morning or evening session will see one invited speaker session taking place in parallel with multiple sessions of mini-symposia and contributed papers. As is usual, mini-symposia will involve one lead (invited) talk followed by contributed papers all focused on the same topic. The mini-symposia are ideal sessions to integrate the JPS and DNP communities around topics of mutual interest. Contributed talk slots will be 15 minutes, time for a 12 minute presentation with three minutes allotted for questions and discussion. Lead talks in mini-symposia will be 30 minutes (25+5) in length. Invited session talk slots will be 45 minutes (35+10) in length.

Luau Tickets

There will be a luau on Friday evening at 6:00 p.m. Advanced tickets for adults (13 - 99 years old) will be \$115. On-site tickets will cost \$130. Tickets for children (5-12) will be half price. Kids 4 and under will not be charged.

Organizing Committee

David J. Dean, ORNL
 Abhay L. Despande, BNL
 Benjamin F. Gibson, LANL, co-chair
 Kouichi Hagino, Tohoku Univ.
 Kenneth H. Hicks, Ohio Univ.
 R. Kruecken, TRIUMF
 Tomofumi Nagae, Kyoto Univ., co-chair
 Takashi Nakano, Osaka Univ.
 Akira Ohnishi, Kyoto Univ.
 Tomohiro Uesaka, RIKEN

Program Committee

Robert Janssens, Chair	Tomofumi Nagae
Christine Aidala	Takashi Nakano
David Dean	Hiroyuki Noumi
Jon Engel	Akira Ohnishi
Nadia Fomin	Julie Roche
Benjamin Gibson	Andrew Rogers
Taku Gunji	Shoichi Sasaki
Greg Hackman	Kimiko Sekeguchi
Kouichi Hagino	Phiala Shanahan
Kenneth H. Hicks	Matthew Shepherd

Or Hen	Tomohiro Uesaka
Kei Iida	Alfredo Galindo-Uribarri
Daniel Kasen	Yutaka Utsuno
Benjamin Kay	Julia Velkovska
Kriishna Kumar	John Wilkerson
	Christopher Wrede

The registration fee includes the workshop coffee breaks, the plenary coffee break, and the reception. In addition, coffee will be provided free of charge, each day before the first session. The companion's registration offsets in part the cost of coffee breaks, companions program, and reception. A banquet will be held on Friday evening at an additional cost. WiFi will be provided in the meeting room area. Registration costs are indicated in the following table.

Registration

Registration and hotel reservations will be handled via the web by Complete Conference Coordinators, Inc. Registration will open by mid May. A link will appear on the conference web site, and an e-mail announcement will be distributed.

Important Deadlines

Abstract Submission:	1 July
Hotel Reservation:	12 September
Early Registration:	12 September
Late Registration:	12 October

Registration Categories & Deadlines	Members	Non members	Students/ Unemployed	Companions Registration
Early Registration (by 12Sept.)	\$325	\$650	\$150	\$75
Late Reg. (13 Sept. – 12 Oct.)	\$375	\$750	\$175	\$90
On-site Reg.	\$450	\$900	\$250	\$100
Luau Tickets (Advanced/On-Site)	\$115/\$130	\$115/\$130	\$115/\$130	\$115/\$130

11. HAWAII 2018 PROGRAM INFORMATION

An insert accompanying this newsletter provides information regarding the Hawaii 2018 Workshops, Plenary Session, Invited Speaker Sessions, and Mini-symposia. The APS website to receive abstracts will open in mid May: <http://abs.aps.org/>.

12. FUTURE MEETINGS

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

“13th Int’l Conference on Hypernuclear and Strange Particle Physics” (HYP2018)

24-29 June 2018, Norfolk, VA

Contact: Liguang Tang Email: tangl@jlab.org

URL: <https://www.jlab.org/conferences/hyp2018>

“XXII Int’l Conf. on Few-Body Problems in Physics”

9-13 July 2018, Caen, France

Email: fb22-caen@sciencesconf.org

URL: <https://fb22-caen.sciencesconf.org/>

“36th Int’l Symposium on Lattice Field Theory (Lattice 2018)

22-28 July 2018, East Lansing, MI

Contact: Huey-Wen Lin

Email: hwlin@pa.msu.edu

URL: <https://web.pa.msu.edu/conf/Lattice2018/>

“Conference on Application of Accelerators in Research and Industry” (CAARI 2018)

12-17 August 2018, Grapevine, Texas (Gaylord Texan)

Contact: Carley Parriott,

Email: cparriott@sandia.gov

“Compound Nuclear Reactions” (CNR*18)

24-28 September 2018, Berkeley, CA

Contact: Jutta Escher

Email: escher1@llnl.gov

URL: <https://indico.bnl.gov/e/CNR2018>

“8th International Conf. on Quarks and Nuclear Physics”

13-17 November 2018, Tsukuba, Japan

Contacts: S Kumano & Shinya Sawada

URL: <http://www-conf.kek.jp/qnp2018>

Email: qnp2018@m1.post.kek.jp

DAVID J. DEAN Chair

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HAWAII 2018 (Waikoloa) Proposed Tuesday Workshops

Title	Organizers
Large-scale computation for nuclear many-body problems	Utsuno / Nazarewicz
Insights into Hypernuclear Physics from JLab and J-PARC	Hiyama / Gibson
Physics and chemistry of the heaviest elements and nuclei	Sakai / Rykaczewski
Spectroscopy of flavored baryons	Hosaka / Joo
Nuclear Fission Turns 80	Nishio / Vogt
Quenching of Spectroscopic Factors: Open Questions and Future Perspectives	Wimmer / Crawford
Fundamental Physics at Low Energy (I)	Mibe, Sakemi, Shimizu, El-Kharda, Hertzog, Mueller, Snow
Fundamental Physics at Low Energy (II)	Mibe, Sakemi, Shimizu, El-Kharda, Hertzog, Mueller, Snow
Proton Charge Radius Puzzle	Suda, Gasparian
R-process in the era of neutron star merger observations	Kajino, Estrade
Active Target TPC's for the study of nuclear reactions form near barrier to high energy	Suzuki, Bazin, Mittig
Hadron structure 1	Goto, Reidl, Vossen, Melnitchouk
Hadron structure 2	Goto, Reidl, Vossen, Melnitchouk
Future Prospects of Neutrinoless Double Beta Decay Searches	Kishimoto, Poon
Implication for the nuclear Equation of State from the neutron star merger event	Isobe, Maruyama, Tsang, Danielewicz
Surrogate techniques for neutron-induced reactions on radioactive nuclei for fundamental and applied nuclear science	Kubono, Cizewski
Evolution of nuclear properties towards the drip lines: Reaction studies with large-acceptance spectrometers	Nakamura / Zegers
Gamma-ray Spectroscopy in Japan and North America: Recent Highlights and Future Opportunities	Aoi / Macchiavelli
Antiproton Physics: Fundamental Symmetries, Hadron structure, and the Universe	Matsuda / Fujiwara
Probing Quark-Gluon Plasma with Jets and Heavy-flavor Particles	Chujo / Velkovska

Proposed Invited Sessions

Title	Organizers
Cold Dense Matter and Neutron Stars	Iida, Hen
Exploring QCD through the hadron spectrum	Hicks, Shepherd
Frontiers of QGP physics	Gunji, Velkovska
Frontiers of nuclear theory	Utsuno, Hackman
Quantum Computing and Machine Learning for Nuclear Physics	Shanahan, Sasaki
Recent Advances in Neutrino/Nuclear Physics	Engel, Wilkerson

Proposed Mini-Symposia

Title	Session Organizers
The Properties of rp-Process Nuclei	Kay, Rogers, Uesaka,
The Structural Diversity of Nuclei in the Proximity of N=20 and 28	Kay, Rogers, Utsuno
From two to three-nucleon correlations in nuclei : recent results and implications	Sekiguchi, Hackman, Fomin, Hen
Hadron transport models for symmetry energy	Ohnishi, Wrede, Tsang
CAGRA	Hackman, Nakano
Active Target Techniques For Studies with Exotic Beams	Kay, Rogers, Uesaka
Proton Puzzles	Deshpande, Qiu, Shanahan, Goto, Iwata, Sasaki, Suda
Collectivity from small to large colliding systems	Gunji, Hirano, Velkovska
Chirality and vorticity in high-energy nuclear collisions	Gunji, Hirano, Velkovska
The search for a critical point in the QCD phase diagram	Velkovska, Chujo, Esumi
Studying Quantum Chromodynamics at an Electron-Ion Collider	Aidala, Sasaki, Roche, Shanahan
Hadron Spectroscopy with Electron, Photon, and Hadron Beams	Kaneta, Aidala, Noumi
Mini-symposium on fundamental symmetries (many-body systems)	Ichikawa, Behr, Nakano, Fomin
Fundamental Neutron Physics	Fomin, Broussard, Snow, Martin, Hatanaka
Strangeness Nuclear Physics Today and Tomorrow	Tamura, Ohnishi, Gibson
Intersections of Neutrino and Charged Lepton Scattering	Keppel, Roche, Fomin, Sasaki
Intersections of Neutrino Physics and Neutrino Physics	Galindo-Uribarri, Menendez, Uesaka