

**Division of Nuclear Physics** 

The American Physical Society

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

## ACCOMPANYING THIS NEWSLETTER:

• DNP Nomination Ballot



#### Future Deadlines

- 1 July 2014 DNP Fall Meeting Abstract Submission
- 1 July 2014 Election Nominations
- 1 July 2014 Nomination for Bethe Prize
- 1 July 2014 Nomination for Bonner Prize
- 1 July 2014 Nomination for Feshbach Prize
- 1 July 2014 Nomination for Dissertation Award

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. DNP COMMITTEES

# Executive Committee

Ani Aprahamian, Univ. of Notre Dame, Chair (2014) John F. Wilkerson, Univ. of North Carolina, Chair-Elect (2014) Gordon Cates, Univ. of Virginia, Vice-Chair (2014) Berndt Mueller, Duke Univ., Past-Chair (2014) Benjamin F. Gibson, LANL, Sec.-Trea. (2014) Wick C. Haxton, Univ. of Calif., Div. Coun. (Dec. 2018) George Fuller, Univ. of Calif. San Diego (2014) Haiyan Gao, Duke Univ. (2014) Ronald Gilman, Rutgers Univ. (2015) Filomena Nunes, Michigan State Univ. (2015) Martin Savage, Univ. of Washington (2015) Michael Thoennessen, Michigan State Univ. (2014)

## Program Committee

John F. Wilkerson, Chair (2014) Gordon Cates, Vice Chair (2014) Berndt Mueller, Past Chair (2012) Ani Aprahamian, Past Chair (2013) Benjamin F. Gibson, Sec.-Treas. (2014) Robert Atcher, LANL (2014) Volker Burkert, Jefferson Lab. (2015) Helen Caines, Yale Univ. (2014) Simon Capstick, Florida State Univ. (2015) Jolie A. Cizewski, Rutgers Univ. (2014) Steven R. Elliott, LANL (2014) Richard G. Milner, Mass. Inst. of Tech. (2014) Pieter Mumm, Nat. Inst. of Standard & Tech. (2015) Jerry A. Nolen, Jr., ANL (2014) David Radford, ORNL (2015) Anne Sickles, BNL (2015) Artemis Spyrou, Michigan State Univ. (2015) Rebecca Surman, Union College (2014) Scott Wilburn, LANL (2015)

Other DNP committees will appear in the August Newsletter.

# 2. 2014 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 2015 April meeting in Baltimore, MD. John F. Wilkerson will become Chair, Gordon Cates will become Chair-Elect, and Ronald Gilman, Filomena G. Nunes, and Martin Savage will remain members of the Executive Committee as will Ani Aprahamian as Past Chair. A Vice-Chair, Secretary-Treasurer, and three members of the Executive Committee are to be elected.

The enclosed nominating ballot must be signed and may be returned in the enclosed envelope with your name and address printed or signed legibly in the upper left hand corner of the envelope. The nominating ballot can be downloaded. It should be received by **Benjamin F**. **Gibson** on or before **1** July 2014 in order to be compiled. The DNP bylaws require that a nominee proposed for a given post by not fewer than one-fiftieth of the members (53 for this election) shall be deemed nominated for that post.

If you are a DNP member, please exercise your right to nominate candidates for the upcoming DNP elections. In 2013 there were only 41 nomination forms received by the Secretary-Treasurer. More members do vote in the DNP elections, but in January 2014 only some 799 of 2600+ members voted. **It is important to vote!** 

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- Call for Prize/Award Nominations
- Future Meetings
- HAW 2014 (Waikoloa)

# CALL FOR PRIZE/AWARD NOMINATIONS

## 3. NOMINATIONS FOR THE 2015 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, 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, and W. A. Zajc.

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, but a particularly outstanding piece of theoretical work may 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. See the APS web site.

Submit name of proposed candidate and supporting material before *1 July 2014* to the APS via web submission.

## 4. NOMINATIONS FOR THE 2015 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, George M. Fuller, and Karl Ludwig Kratz.

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 July 2014* to the APS via web submission.

## 5. NOMINATIONS FOR THE 2014 HERMAN FESHBACH PRIZE IN NUCLEAR PHYSICS

This prize was established in 2013 by friends, students, and associates of Herman Feshbach. The initial prize winner was John W. Negele.

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 July 2014* to the APS via web submission.

# 6. NOMINATIONS FOR THE 2014 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. 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, Daniel Bardayan, Juinn-Wei Chen, Karsten Heeger, Andrew Steiner, Andriy Kurylov, Li-Bang Wang, Kathryn Miknaitis and Magdelena Djordjevic, Nikolai Tolich and Deepshikha Choudhury, Steven Clayton and Thomas Banks, Calem R. Hoffman, and Huicho Song and Matthew Luzum, Emanuelle Mereghetti and Phillip Barbeau, Gang Shen, and Katherine Myers.

**<u>Nature</u>:** 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.

**<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 July 2014. See the APS web site.

Submit before *1 July 2014* 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:Ani Aprahamian, Univ. of Notre Dame, Dept. of Physics, 225 Nieuwland Science, Notre Dame, IN 46532.

#### 7. 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 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.

2015	October 28-31	Santa Fe, NM	
2015	0000001 20 31	Dunta I C, 1 101	

#### 8. FUTURE APS SPRING MEETING INFORMATION

2015	Apr 11-14	Baltimore, MD
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 JAPANESE, R.G. Milner

In October 2014, we will hold the fourth 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, and 2009 were outstanding successes.

Hawaii 2014 will be held at the Hilton Waikoloa Village on Hawaii's Big Island, 7-11 October, 2014. In addition to showcasing exciting nuclear physics, Hawaii 2014 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.

#### Hotel:

The venue for this year's joint meeting, the Hilton Waikaloa, is the same as for the 2009 meeting and is located just 18 miles north of the Kona International Airport. Complete Conference Coordinators, Inc. has negotiated a very favorable rate for the meeting. The resort is located on a 62 acre parcel on the ocean, has ample meeting space, and a 4 acre lagoon for snorkeling and swimming with dolphins. It is near a shopping center with several restaurants and a food court. The venue is near Mauna Kea and the Keck and Subaru Observatories.

#### **Meeting Format:**

The meeting structure for Hawaii 2014 will resemble that of the previous joint meetings. Workshops will be held on Tuesday October  $7^{\text{th}}$ , preceding the plenary and scientific sessions that follow on October

8-11th. 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 paper session taking place in parallel with multiple sessions of contributed papers and mini-symposia. 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 viewed as ideal sessions to integrate the JPS and DNP communities around topics of mutual interest. Contributed talk slots will again 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 talks 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 \$90. On-site tickets will cost \$100. Tickets for children (5-12) will be half price. Kids 4 and under will not be charged.

#### **Organizing Committee**

- A. Aprahamian, Notre Dame Univ.
- B. F. Gibson, LANL
- A. Hosaka, Osaka Univ.
- R. Kruecken, TRIUMF
- R. G. Milner, MIT, co-chair
- T. Nakamura, Tokyo Inst. Tech.
- T. Otsuka, Univ. of Tokyo, co-chair
- Y. Sakemi, Tohoku Univ.
- P. Sorensen, BNL
- H. Tamura, Tohoku Univ.

#### **Program Committee**

John Wilkerson, Chair	Pieter Mumm
Nori Aoi	Takashi Nakamura
Ani Aprahamian	Jerry A. Nolen
Robert Atcher	Takaharu Otsuka
Volker Burkert	Kyoichiro Ozawa
Helen Caines	David Radford
Simon Capstick	Yasuhiro Sakemi
Gordon Cates	Hiroyuki Sakuragi
Jolie A. Cizewski	Anne Sickles
Steven R. Elliott	Artemis Spyrou
Kenji Fukushima	Rebecca Surman
Benjamin F. Gibson	Hirokazu Tamura
Atsushi Hosaka	Hideki Ueno
Richard G. Milner	Scott Wilburn

#### Important Deadlines

Abstract Submission:	
Hotel Reservation:	
Early Registration:	

July
September
September

### Registration

Registration will be handled via the web by Complete Conference Coordinators, Inc. Registration will open in early May. A link will appear on the conference web site, and an e-mail announcement will be distributed. 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 Categories & Deadlines	Members	Non members	Students/ Unemployed	Companions Registration
Early Registration (by Sept. 2 <sup>nd</sup> )	\$300	\$600	\$100	\$75
Late Reg. (Sept. 2 <sup>nd</sup> – Sept. 30 <sup>th</sup> )	\$350	\$700	\$175	\$85
On-site Reg.	\$400	\$800	\$200	\$100
Luau Tickets (Advanced/On-Site)	\$90/\$100	\$90/\$100	\$90/\$100	\$90/\$100

# 10. HAWAII 2014 PROGRAM INFORMATION

An insert accompanying this newsletter provides information regarding the Hawaii 2014 Workshops, Plenary Session, Invited Speaker Sessions, and Mini-symposia. The APS website to receive abstracts will open in early May.

# 11. FUTURE MEETINGS

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

#### "From Parity Violation to Hadron Structure" (PAVI 14)

14-18 July 2014 Skaneateles, New York Co-Chairs: Kent Paschke and Paul Souder URL: http://www.pavi14.syr.edu

aapraham@nd.edu

# "Gordon Research Conference on Photonuclear Physics: From Quarks to Nuclei"

Holderness, New Hampshire 10-15 August 2014 Co-Chairs: Ron Gilman & Lothar Tiator URL: http://www.grc.org/programs.aspx?year=2014&program=photonuc

# "Int'l Conference on Exotic Atoms and Related Topics" (EXA2014)

15-19 September 2014 Vienna, Austria Conference Co-Chairs: E. Widmann, J. Marton, J. Zmeskal URL: http://www.oeaw.ac.at/smi/research/talks-events/exotic-atoms/exa-14/ URL: exa2014@oeaw.ac.at

## "21st International Symposium on Spin Physics" (SPIN 2014)

20-24 October 2014 Beijing, China (Peking University) Contacts: Bo-Qiang Ma & Hiayan Gao

gdc4k@virginia.edu

# "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

ANI APRAHAMIAN	JOHN F. WILKERSON	GORDON CATES	<b>BENJAMIN F. GIBSON</b>
Chair	Chair-Elect	Vice-Chair	Secretary-Treasurer
University of Notre Dame	University of North Carolina	University of Virginia	Los Alamos National Lab.
Department of Physics	Department of Physics	Department of Physics	DNP, MS B283
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Notre Dame, IN 46556	Chapel Hill, NC 27599-3255	Chalottesville, VA 22903	Phone: (505) 667-5059
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# HAWAII 2014 PROGRAM DETAILS

# Ani Aprahamian, Hirokazu Tamura, Takaharu Otsuka, Richard Milner, and John Wilkerson

The Hawaii 2014 program will open with Workshops on Tuesday, 7 October. The Workshop selection was made from multiple suggestions by teams of DNP and JPS members by Ani Aprahamian and Hirokazu Tamura. The workshops will be either full day or half day in length. In either case there will be a break half way through the morning and afternoon. The pairing of half day Workshops is not yet final. The tentative Workshop titles are:

Full Day Full Day Full Day Full Day Full Day	Computational nuclear physics Neutrinoless Double Beta decay and related topics Science and next generation experiments at FRIB and RIBF Exotic Hadrons and Strangeness Nuclear Physics across the Date Line Hadron structure and spectroscopy
Morning 1/2 Day 1/2 Day 1/2 Day 1/2 Day 1/2 Day	Explosive nucleosynthesis in SNe and XRB as multi-messengers Applications of nuclear reactions with gamma rays and surrogates for neutrons Future Directions in High Energy QCD Future of hydrodynamic modeling of relativistic heavy-ion collisions Polarized Drell-Yan physics at Fermilab
Afternoon	
1/2 Day	Neutron stars and the properties of nuclear mater at high densities
1/2 Day	Physics opportunities with high resolution spectrometers; CAGRA and GRAND RAIDEN
1/2 Day	Quark gluon plasma and future directions in relativistic heavy-ion physics at RHIC and LHC
1/2 Day	Developments in confinement techniques for precision low-energy nuclear physics experiments with radioactive ion beams
1/2 Day	Big questions in the LHC era with low-energy precision measurements of CPT and gravity

There will be an evening welcome reception following the Workshop day. All participants and registered companions are cordially invited.

On Wednesday morning, following the day of Workshops and welcome reception, will be the Opening Plenary Session, organized by Hawaii 2014 Joint Meeting co-chairs Takaharu Otsuka and Richard Milner. The session will have four speakers:

# Nick Samios, Brookhaven National Laboratory

Dr. Samios will discuss the important contributions of the RIKEN BNL Research Center in the context of RHIC, and describe its considerable impact on international science. RBRC has been an outstanding success and is a model for international collaboration. Dr. Samios was Director of the RIKEN BNL Research Center (RBRC) in the years 2003 - 2013. He is a distinguished experimental particle physicist, led the discovery of the  $\Omega$ - baryon, and has served as Director of Brookhaven National Laboratory.

# Hiroyoshi Sakurai, RIKEN

Prof. Hiroyoshi Sakurai will overview current topics and future perspectives of the physics with rare isotope beams in both countries including those by RIBF in Japan and FRIB in US. Dr. Sakurai is a chief scientist in RIKEN in the field of experimental nuclear physics, serving as the deputy director of Nishina Centre for Accelerator-based Science of RIKEN. He is a member of the Science Advisory Committee for FRIB.

# Robert McKeown, Jefferson Laboratory

Dr. McKeown will overview current developments in electroweak nuclear physics, with an emphasis on experimental work with neutrino and electron beams. He is a distinguished experimental nuclear physicist. He is Chief Scientist at Jefferson Lab, was a Professor of Physics at Caltech and has been active in research in both neutrino physics (KamLand and Daya Bay) and parity violating electron scattering.

# Satoru Tanaka, University of Tokyo

Prof. Tanaka is a professor of nuclear engineering at the University of Tokyo. He was the president of the Atomic Energy Society of Japan, and is now the chair of the Investigation Committee on the Nuclear Accident at the Fukushima Dai-ichi NPP of this Society. This committee will make a report in spring 2014. He has been asked to present highlights of the report, including the meltdown in those reactors that has not yet been clarified. He has accepted the invitation to give a plenary talk at Hawaii 2014.

The parallel scientific sessions begin on Wednesday evening – one invited speaker session plus multiple mini-symposia and contributed paper sessions. The invited sessions and mini-symposia were formulated by the Program Committee under the direction of chair John Wilkerson. The 6 invited sessions will be

- Strangeness Aspects of Nuclear Physics (organized by B. Gibson & H. Tamura) Martin Savage Reinhard Schumacher S. N. Nakamura Emiko Hiyama
- 3D Imaging of the Nucleon (organized by V. Burkert & K. Ozawa) Anatoly Radyshkin Silvia Pisano Shunzo Kumano Yoshitaka Hatta

- Weak interaction rates for nuclear astrophysics (organized by R. Surman and N. Aoi) Shunji Nishimura Robert Gryzwacz Remco Zegers Shinya Wanajo
- Advances in neutrino/nuclear physics (organized by R Surman & Y. Sakemi) Takashi Kobayashi Shunzo Kumano Brian Tice Gail McLaughlin
- Frontiers of Gamma-Ray Spectroscopy: New insights into the structure of exotic nuclei. (organized by N. Aoi, & D. Radford) Dirk Weisshaar Michael Carpenter Peter Doormenbai Shunji Nishimura
- Physics of Dense Gluon Systems (organized by H. Tamura & R. Milner) TBD Masaka Ishitsuka Shinichi Esumi Yuri Kovchegov

The 22 mini-symposia proposed by the Program Committee are listed below (with the organizers). Remember that, because the lead speaker will have introduced the topic, any mini-symposium contributed speaker should be able to omit introductory material and speak more about the details of her/his work.

- 14a. Hybrid and molecular hadrons (V. Burkert, S. Capstick\*, A. Hosaka)
- 14b. Targets for the Next Generation of Radioactive Ion Beam Experiments (J. Cizewski & H. Tamura)
- 14c. Flow-like Observables in Heavy Ion Collisions (H. Caines\* K. Ozawa, A. Sickles)
- 14d. Jets and high pT probes in Heavy Ion Collisions (includes Heavy Flavor production) (H. Caines, K. Ozawa, A. Sickles\*)
- 14e. Baryons with Spatial and Flavor Excitations (V. Burkert\*, S. Capstick, A. Hosaka\*)
- 14f. Precision Measurements with Cold and Ultracold Neutrons (P. Mumm & Y. Sakemi)
- 14g. Three Nucleon Forces from Few to Heavier Nucleon Systems (T. Nakamura & A. Spyrou)
- 14h. Nuclear Matter in Neutron Stars (H. Tamura & B. Gibson)
- 14i. Fundamental Symmetries Tests at Low Energies (includes EDM) (P. Mumm & Y. Sakemi)
- 14j. Superheavy element studies: new results in experiment and theory (J. Cizewski, J. Nolen\*, N. Aoi)
- 14k. Nuclear Structure of Neutron-rich Exotic Nuclei (J. Nolen and T. Otsuka)
- 141. Double beta decay (T. Otsuka & S. Elliott)
- 14m. Neutrino Interactions (S. Elliott, Y. Sakemi, S. Wilburn)
- 14n. Sterile Neutrinos (S. Elliott, P. Mumm\*, K. Ozawa)

- 140. Transfer and charge exchange reaction studies with stable and radioactive ion beams (N. Aoi, J. Cizewski, A. Spyrou)
- 14p. Nuclear reaction rates relevant to stellar evolution and nucleosynthesis (N. Aoi and R. Surman)
- 14q. Using particle-gamma coincidences to study nuclear reactions and structure with radioactive ion beams (N. Aoi, J. Cizewski, H, Sakuragi, A. Spyrou)
- 14r. Technological Developments for low-radioactivity-background experiments (S. Elliott & K. Ozawa)
- 14s. New Insight into hadronic structure from space-like and time-like form factors (G. Cates and A. Hosaka)
- 14t. Decay Spectroscopy of Exotic Nuclei (N. Aoi & D. Radford)
- 14u. Unbound nuclear states and correlations beyond the drip lines (T. Nakamura & A. Spyrou)
- 14v. Nuclear and neutrino physics of neutron star mergers and its multi-messenger imprints (J. Wilkerson)