GHP Newsletter

American Physical Society Topical Group on Hadron Physics

http://www.aps.org/units/ghp/

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NB. EMail addressed to ghpexec@anl.gov will reach all members of the Executive.

Join GHP by following a link on the lower-right of our web page; namely, from: http://www.aps.org/units/ghp/.

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1 Joint Town Meetings on QCD

As part of the NSAC 2014 Long Range Planning process, two Town Meetings were arranged to overlap at Temple University in the period 13-15 September 2014: *QCD and Hadron Physics* and *Phases of QCD Matter*. The meetings held both parallel and joint sessions, as may be seen from the agendas posted at

https://phys.cst.temple.edu/qcd/.

A total of 244 physicists registered for the joint meetings, with 136 for QCD and Hadron Physics and 108 for Phases of QCD.

Recommendations from those Town Meetings have been circulated and are posted at the Temple University website, indicated above.

White papers derived from the material presented at the Town Meetings are currently in preparation. A draft of that from *QCD* and *Hadron Physics* has been made available for comment from those people who registered for this Town Meeting. It is anticipated that the convenors of the *Phases of QCD* Town Meeting will follow a similar procedure. Following this additional opportunity for community input, appropriately revised versions will be submitted to the DNP Executive. The final versions are required by the end of January.

It is anticipated that the resolution meeting of the Long Range Plan Working Group will be held in late-March or early-April and the final report will be released in October 2015.

2 Thesis Prize

The GHP Dissertation Award was established in February 2012, thanks to significant contributions from Brookhaven Science Associates (the management contractor for the Brookhaven National Laboratory), Jefferson Science Associates, LLC (the management contractor for Jefferson Lab), Universities Research Association (the management contractor for Fermi National Accelerator Lab) and personal contributions from some of our members.

The Award is a prize of \$1000 and a travel allowance of up to \$1500; and the winner will be invited to deliver a plenary presentation at GHP 2015.

Nominations for the Second GHP Dissertation Award closed on 6 October, 2014. We received 14 excellent nominations, making it extremely difficult to choose only one winner. The nominations were reviewed by the Dissertation Award Committee:

Christine Aidala	Matthias	Burkardt	Ian Cloët
U.Michigan, Ann Arbor	NM	ISU	ANL
caidala@bnl.gov	burkardt@	nmsu.edu	icloet@anl.gov
Susan Schad Forschungszentr s.schadmand@fz-	mand rum Jlich -juelich.de	Ramona LLNL/UC rlvogt@lt	Vogt -Davis bl.gov

The submissions were judged according to the following criteria: quality of the written dissertation (40%), contribution of the student to the research (30%), impact of the work (15%), and broader involvement of the student in the community (15%).



Figure 1: Daniel Pitonyak, winner of the 2015 GHP Dissertation Award, for his thesis entitled: "Exploring the Structure of Hadrons Through Spin Asymmetries in Hard Scattering Processes."

After extensive deliberations, the panel selected *Daniel Pitonyak* (pictured) as the 2015 Winner of the GHP Dissertation Award, for his thesis entitled:

Exploring the Structure of Hadrons Through Spin Asymmetries in Hard Scattering Processes.

Daniel received his Bachelor of Science degree from Lebanon Valley College, Annville, PA, in 2008, and his Ph.D. from Temple University, Philadelphia, PA, in 2013, working with Prof. Andreas Metz. Daniel is now a postdoctoral fellow at the RIKEN BNL Research Center.

Daniel's thesis deals primarily with the calculation of single-spin and double-spin asymmetries for lepton- and hadron-induced hard scattering processes. Of particular importance is the first complete analytical calculation of the transverse single-spin asymmetry in single-inclusive hadron production for proton-proton collisions using collinear twist-3 factorization in QCD. The large effects found for this observable represent a 40-year old puzzle in hadronic spin physics. The thesis also showed that, in contrast to a widespread belief, this single-spin asymmetry is probably *not* caused by the initial state (Sivers) effect but, instead, the twist-3 fragmentation contribution. Moreover, a study of the transverse single-spin asymmetry for fully inclusive DIS provided the first ever phenomenological indication that the Sivers effect is indeed process-dependent, as predicted in a seminal paper by John Collins in 2002. Daniel's thesis work has implications for JLab12, RHIC spin physics, and a future EIC Please join all members of the GHP Executive in offering your heartiest congratulations to Daniel.

Let us also congratulate the other nominees. All the nomination packets were excellent; and both the number and their quality demonstrate the healthy state of our field.

The current endowment enables GHP to present the Dissertation Award biennially. In order to maintain that endowment and, perhaps, to expand the Award, the Executive encourages our members to

Donate to the award fund.

For information on how to proceed, please see: https://www.aps.org/memb-sec/profile/DonationFunds.cfm

It would be ideal if we could increase the endowment so that sufficient funds were available to present this award in every year and thereby honor more of the bright young scientists entering Hadron Physics.

3 Elections

Elections for two posts in the GHP Executive closed on 21st November 2015. The new Executive Committee is listed at the top of this newsletter. We are pleased to welcome Paul Reimer (vice-chair) and Leonard Gamberg (member-at-large).





Figure 2: The two new members of GHP's Executive Committee – Paul Reimer, Vice-Chair (left) and Leonard Gamberg, Member-at-Large (right).

On behalf of GHP, the Executive thanks the people who entered their names on the ballots.

In addition, we thank John Arrington and Susan Schadmand for their efforts in the GHP Executive on behalf of hadron physics and beyond.





Colin Morningstar (left) and Stepan Stepanyan (right), GHP's 2014 Fellows.

4 Fellowship

We take this opportunity to congratulate Colin Morningstar (Carnegie Mellon University) and Stepan Stepanyan (JLab), both of whom in 2014 were elected to Fellowship in the APS under the auspices of the GHP:

Colin "For his outstanding contributions to understanding the strong force and its hadron spectroscopy based on the fundamental theory of Quantum Chromodynamics.;"

and Stepan "For pioneering research to access generalized parton distributions through deeply virtual exclusive processes and the 3-dimensional imaging of the nucleons quark structure, and for the development of innovative experimental methods and apparatus in medium energy hadron physics."

This is a good time to remind the GHP that each year the APS allocates a number of Fellowship Nominations to a Topical Group. That number is based primarily on membership. Since we are in the neighbourhood of 500 members, we are allocated TWO Regular nominations.

The Executive urges members of GHP to be prepared in 2015 to nominate colleagues who have made advances in knowledge through original research and publication or made significant and innovative contributions in the application of physics to science and technology. They may also have made significant contributions to the teaching of physics or service and participation in the activities of the Society.

The instructions for nomination may be found at http://www.aps.org/programs/honors/fellowships/nominations.cfm The entire process is now performed on-line.

A few things to know before proceeding, however. One must

- Ensure the nominee is a member of the Society in good standing. The on-line site will do this for you but it's best to check beforehand, to save yourself time or get your nominee to join APS and GHP.
- A nomination requires a sponsor and a co-sponsor. During the on-line nomination process, you will be required to provide details for a co-sponsor. After you complete a

nomination, the co-sponsor will be notified by EMail. It would be best to coordinate with the co-sponsor beforehand.

- In addition to the nomination letters, you will require supporting letters, that will need to be up-loaded to the APS web site. Two letters of support are sufficient. Individuals providing letters of support do not have to be members of the APS, however, in practice it is preferable that sponsors be APS Fellows.
- The nomination process should be complete prior to GHP's deadline:

Monday 1st June 2015

The APS will subsequently forward the nominations to the GHP Fellowship Committee, which will soon be formed by Paul Reimer, GHP's newly elected Vice-Chair.

5 GHP 2015: 6th Workshop of the GHP

Planning is well underway for the Sixth Workshop of the APS Topical Group on Hadron Physics. We will follow the pattern of our previous successful meetings, so that the workshop will take place over 3 days:

8-10 April 2015

i.e., just before the APS April Meeting, being held in Baltimore, MD, and at the same venue: Hilton-Baltimore, Inner Harbor.

As information becomes available, it will be added to the GHP 2015 Website http://www.jlab.org/indico/event/GHP2015.

Important reminder:

GHP2015 is a separate event from the 2015 APS April Meeting (discussed below), and has a separate registration fee. The Executive has set the scale of registration fees as follows: *Regular*: \$100 (\$120 for non-members); and *Students*: \$20 (\$40 for non-members).

Registration and abstract submission are now open. The deadline for Abstract Submission is Friday 21 February 2015

The deadline for registration (and concomitant online payment) is one month later; i.e., Friday 20 March 2015

Questions about either process should be directed to Susan Schadmand at ghpworkshops@gmail.com

We would like to highlight that at GHP15, we plan to hold a 90 minute poster session on the 2nd day. Abstracts can therefore be submitted, requesting either a contributed talk or poster presentation.

In this connection, the Executive hopes that the much-reduced registration fee for students and the opportunity to present a poster will encourage student participation in this prominent meeting of our Topical Group. We would like to urge any students who plan on attending the April APS meeting to consider coming early and participating in the GHP meeting as well.

Programme:

Peter Petreczky and Raju Venugopalan are co-chairing the Programme Committee, which is constituted from the entire Executive and selected members of GHP.

Programme committee:

- Christine Aidala (caidala@bnl.gov)
- John Arrington (johna@anl.gov)
- Matthias Burkardt (burkardt@msu.edu)
- Leonard Gamberg (lpg10@psu.edu)
- Ken Hicks (hicks@phy.ohiou.edu)
- Craig Roberts (cdroberts@anl.gov)
- Peter Petreczky (petreczk@quark.phy.bnl.gov)
- Susan Schadmand (s.schadmand@fz-juelich.de)
- Paul Reimer (reimer@anl.gov)
- Raju Venugopalan (raju@bnl.gov)
- Ramona Vogt (rlvogt@lbl.gov)
- Feng Yuan (fyuan@lbl.gov)

The programme of invited presentations is currently being prepared. It will canvass a range of topics, which include:

- AdS/QFT, novel phenomena
- Continuum QCD and Phenomenology
- Exotic hadrons
- Future facilities
- Lattice QCD
- Light and heavy quark mesons and baryons
- Nucleon spin physics and hadronic structure
- Physics of the quark-gluon plasma
- Physics of gluon saturation

We note that a GHP business meeting is scheduled for Wednesday Evening, April 8th; and a reception/workshop dinner will be held on Thursday, April 9th.

The GHP has a *limited* amount of funds that the Executive intends for use in support of the travel of some junior scientists. Interested people should contact Peter Petreczky or Craig Roberts for details.

As past meetings have demonstrated, the GHP workshop offers a very good opportunity for nuclear and particle physicists to meet and discuss their common interests in hadronic interactions. So please mark these dates and the location in your calendar, and plan on attending.

The GHP Executive would like to express gratitude for generous sponsorship of GHP2015 by Brookhaven National Laboratory and the Thomas Jefferson National Accelerator Facility.

6 APS April Meeting, 2015

11 – 14 April, Baltimore, MD http://www.aps.org/meetings/april/index.cfm

6.1 GHP Program

GHP participates in the annual APS April Meeting, which is also the primary meeting of the unit in even years. Roughly 100 of our members attend the APS April meeting each year.

GHP is allocated two invited sessions at the April meetings. We often organize joint sessions with other units, in order to raise our profile by increasing the number of sessions sponsored by the GHP. (The maximum currently possible is four.)

The program committee for 2015 APS April meeting is

2014 GHP Program Committee, preparing for April 2015

Peter Petreczky	Ken Hicks	Craig Roberts	Raju Venugopalan
petreczk@quark.phy.bnl.gov	hicks@ohio.edu	cdroberts@anl.gov	raju@bnl.gov

Peter Petreczky is Chair.

The focus of the session sponsored by solely by GHP is "Hadron Spectroscopy."

GHP will also co-sponsor two joint-sessions: one with DPF on "Hadron spectroscopy with heavy quarks," and one with DNP, on EIC-related physics.

Thus far, confirmed speakers include: Abhay Deshpande; Xiangdong Ji; Sasa Prelovsek; Reinhard Schumacher; Adam Szczepaniak; Kirill Tuchin

6.2 April 2016

Moving on to next year, **Raju Venugopalan** will serve as Chair of the GHP's 2015 Program Committee. Now that elections are complete, Raju can begin to form his four-person committee and begin planning for April 2016.

The 2016 April Meeting is scheduled for

16-19 April 2016, Salt Lake City, UT. http://www.aps.org/meetings/meeting.cfm?name=APR16

7 Membership



Figure 3: Solid line – GHP membership, true value, with "2014" representing the APS Official Count at the beginning of 2014 and the end-point indicating membership as of October 2014; long-dashed – DNP membership normalized to GHP's value in 2005 (2401 \rightarrow 304); and short-dashed – DPF membership normalized to GHP's value in 2005 (3291 \rightarrow 304).

As of 6 October 2014, the APS Unit Membership Statistics list GHP with 478 members, which represents 0.95% of APS membership. This represents a loss of 20 members (4%) since January 2014. In this connection, it is notable that membership in DNP dropped by 10 people (0.4%) and that in DPF fell by 122 (3.4%).

There are thirteen Topical Groups listed in the October 2014 Unit Membership Statistics. Of these Groups, GHP is now one of the smallest, ranked 9th in terms of membership; and only the Topical Groups "Magnetism" and "Shock Compression" have lost a greater share of their membership so far this year.

Notwithstanding these observations, a drop in membership is typical toward the end of a year in which there is no GHP meeting, as apparent in Fig. 3. The Executive anticipates that membership will grow again in the lead-up to the 6^{th} Biennial Workshop of the GHP, for which the structure of registration fees favours GHP members, as described in Sec. 5.

So long as GHP membership rebounds and we can thereby maintain a level of approximately 500, we will be able to make two regular-fellowship nominations in 2016, which is a continuing excellent boost for Hadron Physics. (See Sec. 4.)

Membership in a strong GHP brings many benefits. A vital GHP

- establishes and raises the profile of Hadron Physics in the broader physics community, e.g., by nominating members
 - to APS governance committees,
 - to APS prize and award selection committees,
 - for election to Fellowship in the APS
- has a greater role in planning the program for major APS meetings;
- and provides a vehicle for community action on topics that affect the way research is conducted and funded.

Whether one considers the APS alone, or takes a broader perspective, the impact GHP can have is primarily determined by the number of members. (It is also influenced by the energy of the Executive.) The Executive urges existing members to encourage their colleagues to join us. We know there are absent-minded people who have overlooked the opportunity to join GHP but many will react positively to a little gentle prodding.

Membership is only \$8. Of this, GHP receives \$5 from the APS. The remainder stays with the APS and covers the many services they provide. They were very helpful, e.g., in connection with the last three GHP meetings. With this support we can be an active force for Hadron Physics. The money can be used, for example, to assist with: the GHP Dissertation Award – see Sec. 2; the organization of meetings – such as the forthcoming GHP2015, see Sec. 5; the preparation of publications that support and promote the GHP's activities; and participation in those fora that affect and decide the direction of basic research.

Hence, if you are reading this newsletter but are not a member of GHP, please join. On the other hand, if you're already a member, please circulate this newsletter to your colleagues and encourage them to join.

Current APS members can add units online through the APS secure server by following a link on the lower-right of our web page; namely, http://www.aps.org/units/ghp/index.cfm.

8 Congressional Visits and Unit Convocation

The Convocation is the gathering of unit officers. It provides for their familiarization with the ways of the APS, and is also an excellent opportunity for unit officers to learn from each other. This year, the Convocation was held at the American Center for Physics (APS Headquarters) in College Park, Maryland on

Friday 20th February – Saturday 21st February.

As in the past two years, the Convocation will provide an opportunity for unit officers and committee chairs to interact with the APS Executive Board and the Presidential Line on Strategic Plan implementation as well as governance and leadership restructuring.

This year, three members of the GHP's Executive have volunteered their time in order to participate: Leonard Gamberg, Member-at-Large; Paul Reimer, Vice Chair; and Matthias Burkardt, Past Chair.

Capitol Hill Visits

In addition, APS encourages Convocation participants to spend Thursday, 19 February, before the Unit Convocation, on Capitol Hill, meeting their Congressional representatives to discuss the contributions that physics and physical science make to the nation. For those involved, this is not always entertaining but usually enlightening. Here, again, Leonard, Paul and Matthias will participate.

9 Science Funding

The APS maintains a web-page devoted to the observation of Capitol Hill: http://www.aps.org/publications/capitolhillquarterly/index.cfm. This site provides a regular snapshot of the state of interactions between science and government.

Of more immediate interest, perhaps, are the consequences of the federal omnibus-spending bill passed by the U.S. Congress on December 14. A perspective on this may be found at http://www.aps.org/publications/apsnews/updates/budget.cfm. The headline states: "Congressional Budget Bill Avoids Drastic Cuts to Science;" and there are a couple of interesting snippets:

- "The NSF, despite an ongoing politically charged probe by the House Science Committee into 'questionable' grants, received \$7.3 billion, a 2.4% increase of \$172 million over last year's allotment and \$89 million above the president's budget request. It's a huge increase compared with the flat funding of most of the other federal agencies."
- "The Department of Energy's Office of Science is budgeted for \$5.1 billion, the same amount as last year."

10 Meeting Summaries

10.1 Highlights of INT Program 14-3 – Heavy Flavor and Electromagnetic Probes

(Communicated by Ramona Vogt <rlvogt@lbl.gov> .)

The Institute for Nuclear Theory program "Heavy Flavor and Electromagnetic Probes in Heavy-Ion Collisions" (INT 14-3), was held 15 September to 10 October 2014. In addition to the four organizers: Ramona Vogt (LLNL and UC Davis), Peter Petreczky (BNL), Anthony Frawley (Florida State), and Enrico Scomparin (INFN Torino), the program was attended by 34 other participants spread out over the four week period.

There are two main thrusts to the study of heavy quarks and quarkonia in heavy-ion physics: "hot matter" (effects specific to the high temperature medium produced in heavy-ion or nucleus-nucleus collisions); and "cold nuclear matter" (effects that are already present in proton-nucleus collisions and are a baseline against which hot matter effects must be compared as well as production of the heavy quarks and quarkonium – bound states of heavy quark-antiquark pairs – in perturbative QCD.)

The program was structured so that the first two weeks were generally devoted to hot matter, especially lattice QCD. The second half was devoted to issues related to production and cold matter effects. To relate the "hot" and "cold" parts of the program, an intense 2.5 day workshop was held in the middle. Although a theory program, experimentalists attended throughout, giving talks on recent data and future facilities.

The theory talks in the first part of the program focused on quarkonium spectral functions, the approach to charm quark chemical equilibrium, the heavy quark diffusion coefficient, next-to-leading order calculations of the photon production rate and the energy loss coefficient \hat{q} , quarkonium suppression in a viscous hydrodynamic medium, and transport calculations of heavy flavor dynamics. Alexander Rothkopf (Heidelberg) presented calculations of quarkonium spectral functions and static quark-antiquark potentials at T > 0, employing a novel Bayesian approach.

The latter half of the program included talks on quarkonium production in vacuum and in cold nuclear matter. Talks on production in vacuum included a global fit to the long-distance matrix elements in the nonrelativistic QCD approach, factorization in NRQCD, and a comparison of the J/ψ total cross section in the color singlet model and NRQCD with a discussion of the universality of the NRQCD matrix elements. There were lively and intense discussions on co-mover interactions in cold matter, the nuclear gluon distribution, and the effects of energy loss in cold matter. One point returned to several times was whether or not the nuclear modification factor R_{AA} , the ratio of production in nucleus-nucleus (AA) collisions to the production in pp collisions, could be factorized into the pA ratios at forward and backward rapidity, $R_{AA} = (\neq) R_{pPb}(y) \times R_{pPb}(-y)$.

The experimental talks included the latest results from RHIC and LHC. Enrico Scomparin (INFN Torino) discussed the ALICE Collaboration results from p+Pb collisions. In particular, he discussed $\psi(2S)$ production at forward and backward rapidity. At backward rapidity, they find significantly larger suppression than for the more strongly bound J/ψ . As described by Torsten Dahms (TU Munich), the CMS Collaboration has also shown results for the $\psi(2S)$, but in Pb+Pb collisions, where, although in a different kinematic region (central rapidity and transverse momentum larger than 3 GeV/c) they find an enhancement of the yields compared to J/ψ . A consistent interpretation of these data poses nontrivial problems. Another interesting result from CMS showed a strong correlation between Υ production and event activity (the number of tracks near the Υ).

There were also talks on proposed future activity. One proposed improved fixed-target measurements of low and intermediate mass dilepton production at the CERN SPS. An upgraded PHENIX detector, sPHENIX, was discussed. Two other facilities for the farther future were described: a larger version of the LHC, referred to as FCC, and AFTER, which has proposed to use a fraction of the LHC beam to conduct a fixed-target experiment.

The program was a success and we thank the INT for their support.

10.2 International Workshop on Heavy Quarkonium 2014

(Communicated by Peter Petreczky <petreczk@quark.phy.bnl.gov>.)

The International Workshop on Heavy Quarkonium 2014 was held at CERN from 10-14 November 2014. This was the 10th edition of the series, started at CERN in November 2002. This workshop is important for researchers working on various aspects of heavy quarkonium physics, including quarkonium spectroscopy and decay, quarkomium production in vacuum, in-medium quarkonium properties, and quarkonium in the standard model and beyond. The workshop was organized under the auspices of the Quarkonium Working Group (QWG). The local organizing committee included Giulia Manca, Michelangelo Mangano, Andreas B. Meyer, Darren Price, Enrico Scomparin and Hermine Woehri.

With over 180 participants, this was the largest workshop of this series. The program of the workshop was very intense. All talks were scheduled in plenary sessions, lasting almost 12 hours each day. Many new and interesting results were presented on the unconventional charmonium states, the so-called XYZ states. In particular, the discovery of the charged Z_c

states poses new challenges as well as opportunities for the theory. Searches for similar exotic states in the bottomonium sector are underway but so far have not yielded any positive results. The LHC experiments play an important role in these studies and this is expected to continue.

The narrow widths of excited bottomonium states above the $B\bar{B}$ threshold have been a puzzle for many years. In his talk, Estia Eichten proposed a novel decay mechanism for these states that involves a pair of correlated B mesons. Theory talks that tried to address the nature of the exotic charmonium states included those by Eric Braaten and Luciano Maini, with the latter being one of the best attended talks of the workshop. Many new, interesting results on quarkonium production in proton-proton, proton-nucleus and heavy-ion collisions were presented by the LHC experiments. The theory status of quarkonium production in proton-proton and proton-nucleus collisions was reviewed by Geoff Bodwin and Jianwei Qiu, respectively.

Chris Quigg gave an overview talk on quarkonium physics from an historical prospective, "Celebrating Quarkonium: The First Forty Years." This talk, a joint CERN colloquium, presented on the fortieth anniversary of the announcement of the J/Ψ discovery, was one of the highlights of the workshop.

More information about the workshops and the Quarkonium Working Group can be found on the QWG webpage, http://www.qwg.to.infn.it/.

11 State of the Laboratories

11.1 Completed: Jefferson Lab 12 GeV accelerator upgrade

(Communicated by Allison Lung - lung@jlab.org.)

After nearly two years with the accelerator shut down for installation work, Jefferson Lab received formal approval from DOE to begin initial operations of the Continuous Electron Beam Accelerator Facility (CEBAF) as part of its ongoing upgrade five months ahead of schedule. Following completion of the CEBAF accelerator upgrade tasks this spring, the machine achieved several critical commissioning milestones that qualified it for consideration of this next approval step.

On Feb. 5, accelerator operators sent electrons around the CEBAF accelerator and achieved full upgrade-energy acceleration of 2.2 GeV in one pass. Then they ran the accelerator at this specification for the next eight hours, achieving 50% availability on their first run of the machine at design specifications. On 1 April, the CEBAF accelerator delivered beam into a target in Hall A, recording the first data of the 12 GeV era. The machine sent 3-pass beam, resulting in 6.11 GeV electrons at 2 nanoAmps average current for more than an hour. On 3 May, the first beam, with energy of 6.18 GeV, was delivered to the front section of the beamline to Hall D, thus demonstrating that all 5.5 passes of the accelerator were functional.

In the early hours of 7 May, the machine delivered its highest-energy beams ever, 10.5 GeV through the entire accelerator and up to the start of the beamline for its newest experimental complex, Hall D. Then, in the last minutes of the day on 7 May, the machine delivered beam, for the first time, into the Hall D Tagger Facility, which converts CEBAF's electron beam into photons that will be used for experiments in Hall D.

With DOE approval of Critical Decision-4A, Accelerator Project Completion and Start of

Operations, Jefferson Lab is continuing development activities to bring the accelerator up to its new, full capabilities. This milestone marks the completion of the accelerator and civil portions of the 12 GeV CEBAF Upgrade project necessary to mark the transition to initial operations of the facility. Installation of upgraded instrumentation continues in experimental Halls B and C, and the GlueX spectrometer now installed in the new Hall D is in the testing phase. Jefferson Lab resumed beam in October with an early goal of demonstrating the project commissioning milestones for Hall D before the end of the year. As the capabilities of the machine are ramped up and instrumentation is implemented, physics quality beam delivered to Halls A and B for experimental running is the plan.

As Jefferson Lab performs beam development activities, the project continues to work toward CD-4B, Approve Experimental Equipment Project Completion. Current projections indicate that the Hall B CLAS12 and Hall C SHMS spectrometers will be ready for beam commissioning in summer 2016.

12 Forthcoming Hadron Physics Meetings

Meetings of interest to GHP's membership are listed at Mark Manley's page: http://cnr2.kent.edu/ manley/BRAGmeetings.html. In this connection, if there is a meeting you feel should be included, please send the appropriate information to John Arrington (johna@anl.gov) or Mark Manley (manley@kent.edu).

The following list is based on Mark's page:

- QNP 2015: 7th Int. Conf. on Quarks and Nuclear Physics (Valparaíso, Chile) Mar. 2-6, 2015
- XIII Hadron Physics: XIII International Workshop on Hadron Physics (Hotel do Bosque, Rodovia Mário Covas, RJ, Brazil) 22-27 March 2015
- Wksp. of the APS Topical Group on Hadronic Physics (Baltimore, MD) Apr. 8-10, 2015
- APS April Meeting 2015 (Baltimore, MD) Apr. 11-14, 2015
- PWA8/ATHOS3: Int. Wksp. on Partial Wave Analysis for Hadron Spectroscopy (Ashburn, VA) Apr. 13-17, 2015
- FB21: 21st Int. IUPAP Conf. on Few-Body Problems in Physics (Chicago, IL) May 18-22, 2015
- CIPANP 2015: 12th Conf. on the Intersections of Particle and Nuclear Physics (Vale, CO) May 18-24, 2015
- NStar 2015: 10th International Workshop on the Physics of Excited Nucleons (Suita Campus, Osaka University, Japan) 25-28 May 2015
- QCD Evolution 2015: JLab, May 26-30, 2015
- 2015 JLab Users Group Mtg. (Newport News, VA) Jun. 1-3, 2015

- CD2015: 8th Int. Wksp. on Chiral Dynamics (Pisa, Italy) Jun. 29-Jul. 3, 2015
- Hard Probes 2015: (Montréal, Québec, Canada) June 29-July 3, 2015
- Quark Matter 2015 (Kobe, Japan) September 27 October 3, 2015
- Fall Meeting, APS Div. of Nuclear Physics (Santa Fe, NM) Oct. 28-31, 2015
- INPC2016: Int. Conf. on Nuclear Physics (Adelaide, Australia) Sep. 11-16, 2016

GHP's members might also be interested in other conferences and workshops listed at the following sites:

- ECT* ... www.ectstar.eu
- INT ... www.int.washington.edu/PROGRAMS/programs_all.html
- JLab ... www.jlab.org/conferences

13 JSA Outstanding Nuclear Physicist Award

Jefferson Science Associates (JSA) calls for nominations for the Outstanding Nuclear Physicist Award to recognize individuals who have made outstanding and sustained contributions, including technical achievements, to experimental and/or theoretical research related to the nuclear physics program at Jefferson Lab. The biennial award consists of a certificate and a \$10,000 honorarium, presented to the honoree at the Jefferson Lab Annual Users Group meeting.

Nomination Guidelines. An individual may submit only one nomination or support letter for a candidate in the award competition. The nomination package should include: Nomination letter describing the candidate's merits including research achievements and contributions; Curriculum vitae; List of publications; and no more than four letters in support of the nomination from eminent scientists in the nominee's field. Of the nomination letter and the four letters of support, one and only one must be from the nominee's home institution and at least one from outside the nominee's home country.

Nomination packages are due 2 February 2015 and should be submitted electronically to jsaprograms@sura.org with the subject line: "2015 JSA ONP Nomination."

More information at http://www.jsallc.org/IF/15ONPAward.html. The JSA Outstanding Nuclear Physicist Award is funded by the JSA Initiatives Fund Program.

* Disclaimer *

The comments and contributions in this newsletter are not peer reviewed. They represent the views of the authors but not necessarily those of the American Physical Society.

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