Third Joint Meeting of the Nuclear Physics Divisions
of the American Physical Society
and the Physical Society of Japan

October 13–17, 2009
Hilton Waikoloa Village
Big Island, Hawaii

GENERAL INFORMATION

The Fall Meeting will reprise the highly successful first two joint meetings of the Division of Nuclear Physics (DNP) of the American Physical Society (APS) and the nuclear physicists of the Japanese Physical Society (JPS). The previous bilateral meetings in 2001 and 2005 were a resounding success, drawing on average more than 900 participants from Japan and North America. This year’s meeting will be held at the Hilton Waikoloa Village on the Big Island of Hawaii on the dates of 13–17 October 2009.

It is again our hope that Hawaii 2009 (HAW09) will serve as a meeting ground to foster cooperation, collaboration, and the exchange of ideas among nuclear scientists from Japan, the U.S., and other Pacific Rim countries. Moreover, it will provide an unusual opportunity for students from Japan and the U.S. to meet, interact, and discuss their visions of careers in nuclear physics. Finally, it is our hope that Hawaii 2009 will be every bit as successful as Hawaii 2005, which occurred during the World Year of Physics 2005, and Hawaii 2001.

All conference functions and sessions will be held in the Hilton Waikoloa Village, located on the Kohala Coast of the Big Island of Hawaii, 20 minutes drive north of the town of Kona. The elegant Hilton Waikoloa Village sits on 62 ocean-front acres offering amenities suited to any taste. These include award-winning dining (including European, Chinese and Japanese restaurants), world-class shopping, and an array of activities ranging from golf and tennis to an interactive dolphin program in the Village’s private lagoon. The hotel offers multilingual guest relations staff, a multiple pool system, snorkeling in the resort lagoon, Hawaiian cultural programs, an extensive Asian art collection, and more. A block of 600 rooms has been reserved.

The Waikoloa Village is located about 30 km north from the Kona International Airport. Shuttle service from the airport is available by SpeediShuttle (www.speedishuttle.com) and the airport is serviced by most major rental car companies. Budget Car Rental has a branch at the hotel.

The Third Joint Meeting is the first in the series to occur on Hawaii’s biggest island. The Island of Hawaii is the largest island in the Hawaiian chain, with an area twice that of all the other Hawaiian Islands combined, and is consequently known as “The Big Island.” It is as diverse as it is large, with astonishingly unique natural wonders including active volcanoes, rain forests, colorful beaches and coffee plantations. The Big Island is home to 1,660 species of flowering plants and 45 species of birds found nowhere else on the planet. The nearby summit of Mauna Kea, and home to the Keck and Subaru telescopes (among others), offers astronomers some of the best viewing conditions on Earth. Tours will be offered to the Subaru telescope prior to, during, and following the meeting.

HAW09 will be a five-day meeting. Workshops will be held on 13 October, preceding the plenary session and traditional scientific sessions scheduled for 14–17 October. The Workshops will be followed by a welcome reception on the Lagoon Lanai.

The plenary session on Wednesday morning will open the main meeting and will highlight the nuclear physics of Japan and the U.S. Scientific sessions will be held during the morning and evening on Wednesday and Thursday. On Friday there will be morning sessions followed in the afternoon by a poster session and Town Meetings, capped off in the evening by a luau. On the last day of the meeting, Saturday October 17th, sessions are scheduled for the morning and afternoon to benefit those with a late evening or early Sunday flight.

As was the case for Hawaii 2001 and 2005, a typical scientific session will see a single invited paper session running in parallel with multiple mini-symposia and contributed paper sessions. Mini-symposia involve one lead (invited) talk followed by contributed papers all on the same topic. The mini-symposia are viewed as ideal
sessions to integrate the JPS and DNP communities around topics of mutual interest. All talk slots are multiples of 15 minutes: contributed papers will consist of a 12 minute talk plus 3 minutes for questions and discussion; lead talks in mini-symposia will be 25 minutes plus 5 minutes for questions and discussion; talks in invited sessions will be 35 minutes plus 10 minutes for questions and discussion. In keeping with the international character of the meeting, all presenters are urged to speak slowly and clearly and to include important points in the images projected on the screen.

**PLENARY SESSION**

The formal meeting activities begin with a plenary session on Wednesday morning, October 14. Distinguished speakers for the U.S. and Japan will share their vision for important nuclear physics in the present and the future. The Plenary speakers are Takaharu Otsuka (U Tokyo), Stuart Freedman (UC Berkeley), Berndt Mueller (Duke U), and Tomofumi Nagae (Kyoto U). The plenary session will be in the Monarchy Ballroom.

**SPECIAL FUNCTIONS**

**Tuesday Evening**

**Welcome Reception**

A welcome reception following the workshops on Tuesday October 13th will be held on the Lagoon Lanai starting at 19:00. This is a wonderful opportunity to meet and interact with colleagues. Light refreshments will be served. The Registration desk will be open during the evening from 18:00 until 22:00.

**Wednesday Morning**

**Companions Get-Together**

A Companions Get-Together with refreshments will be held on the Lagoon Lanai at 10:00 in parallel with the Plenary Session.

**Wednesday Afternoon**

**CSWP/JPS Program on the Status of Women in Physics**

The Committee on the Status of Women in Physics and the Japanese Physical Society will host a ticket-required dinner at 17:00 in Kona 2 & 3. Featured will be an address by Masako Bando (former President of the JPS) on the contributions of women to science and professional societies. For more information, please contact Sherry Yennello of Texas A&M University. The following organizations are thanked for their generous support of this event: The Physical Society of Japan, the Division of Nuclear Physics, Argonne National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, Michigan State University, and Jefferson Laboratory.

**Thursday Afternoon**

**User Group Meetings**

Time for User Group meetings has been set aside on Thursday afternoon. Known User Group meetings at the publication deadline are:

1) RIBF Users Meeting
2) J-Parc Hadron Hall Users Association Meeting

**CEU Undergraduate Get-Together**

The undergraduate student reception, organized by the Conference Experience for Undergraduates director Warren Rogers and the JPS undergraduate coordinator Akira Ohnishi, will be held at 17:00 in Kona 4.

**Graduate Student Get-Together**

The graduate student reception for all graduates, hosted by the DNP and JPS, will be held at 17:00 in Queens 4. All graduate students are invited to meet their fellow students.

**Friday Afternoon**

**CEU Poster Session**

A CEU student poster session has been organized by Warren Rogers and Akira Ohnishi starting at 13:00 on Friday as part of the Conference Experience for Undergraduates. The posters will be exhibited in the Grand Promenade.
PRC/PRL Meet the Editors Function

A drop-in function will be hosted by Physical Review C and Physical Review Letters in the Grand Promenade between 13:00 and 15:00. The Editors cordially invite Hawaii 2009 participants to join them for conversation and refreshments in the area adjacent to the CEU poster session. Comments, questions, suggestions, compliments, and complaints regarding journal issues are welcome.

DNP Town Meeting

A DNP Business/Town Meeting will be held in the Monarchy Ballroom at 15:00. The DNP Distinguished Service Award and the DNP Mentoring Award will be presented. Reports from the Agencies will be heard.

JPS Nuclear Physics Group Meeting

A JPS Nuclear Physics Group Meeting (Kakudan and Kakurikon) of Japanese theorists and experimentalists will be held in Kona 4 & 5 at 15:00.

Friday Evening

Luau

The conference dinner will be in the form of a traditional Hawaiian Luau with Hawaiian entertainment, food, and drinks. It will be held in the Kamehameha Court (the Luau garden). The cost to attend the luau is $90.00 for adults, $80.00 for seniors and teenagers, and $45.00 for children. Seating will begin at 17:30.

Conference Experience for Undergraduates (CEU)

Warren Rogers has organized a program specifically tailored to the nuclear physics undergraduates participating in Hawaii 2009. The goal of the CEU is to provide a "capstone" conference experience for undergraduate students who have conducted research in nuclear physics, by providing them the opportunity to present their research to the larger professional community and to one another. Additionally, it enables the students to converse with faculty and senior scientists from graduate institutions about graduate school opportunities.

Special CEU nuclear physics seminars will be presented in the morning on Thursday and on Saturday in Kings 1. A CEU student poster session will be held in the Grand Promenade during 13:00 to 15:00 on Friday.

CEU 2009 program thanks the following organizations for support: the Division of Nuclear Physics of the American Physical Society, the Physical Society of Japan, the National Science Foundation, and the Department of Energy through the following Laboratories: Argonne National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and Thomas Jefferson National Accelerator Facility, and the following Japanese organizations: Nuclear Physics Forum of Japan, the Nuclear Theory Group of Japan, Research Center for Nuclear Physics, and Yukawa Institute for Theoretical Physics.

On-site conference registration will be:
Monday.................18:00 to 22:00
Tuesday .................8:00 to 13:00; 16:00 to 22:00
Wednesday........8:00 to 13:00; 16:00 to 22:00
Thursday ...............8:00 to 13:00; 18:00 to 21:00
Friday .................8:30 to 11:00; 13:00 to 15:30
Saturday .............8:30 to 11:00; 13:00 to 15:30

Registration

Registration will take place in the Hilton Waikoloa Village convention space area known as the Grand Promenade which is served by the hotel train, boats, and museum walk. Registration will begin on Monday evening and continue through the meeting on Saturday. The registration desk will be open during most of the meeting for registration, meeting information, and other assistance. Both Japanese and English language staff will be available to assist with the registration desk functions. After the early registration deadline of 3 September, the on-line registration fee is $350 for APS and JPS members and $175 for students. Following the closing of the on-line registration, registration must be made on site. On site registration fees are $400 for APS and JPS members and $200 for students. The on-site non-member registration fee is $800.
INDUSTRIAL CONTRIBUTORS

The DNP and JPS wish to thank those members of the industrial community who have contributed financially to the success of Hawaii 2009. In particular, the following industrial contributors are recognized:

Scionix
CAEN
Weiner
Canberra
Coherent

Attendees at Hawaii 2009 are encouraged to stop by the displays and take advantage of the opportunity to explore what each company has to offer.

PROGRAM DESCRIPTION

The program (invited sessions and mini-symposia) for Hawaii 2009 was organized by the DNP/JPS Program Committee under the chairmanship of W. A. Zajc. The workshops were coordinated by L. S. Cardman and S. Shimoura of the Organizing Committee. The Organizers thank Vinaya Sathyasheelappa for his expert assistance in the preparation of all aspects of the program.

Workshops

The meeting will open with eight workshops on Tuesday, 13 October. Sessions are scheduled in the morning and afternoon. The topics and organizers of the parallel workshop sessions are:

1WA: The Physics of Exotic Nuclei
(B. Balantekin, W. Nazarewicz, and T. Otsuba)
2WA: Nuclear physics with New-Generation Fast Rare Isotope Beams
(M. Thoennessen and T. Nakamura)
1WB/2WB: Physics Opportunities with GRETINA
(C. Beausang and T. Motobayashi)
1WC/2WC: Frontiers in Nuclear Astrophysics
(T. Kajino, H. Schatz, and M. Wiescher)
1WD/2WD: Neutrinoless Double Beta Decay
(T. Kishimoto, M. Nomachi, and K. Lesko)
1WE/2WE: Physics with Neutrons
(J. Martin and Y. Masuda)
1WF/2WF: The Structure of Hadrons and Hypernuclei
Studied by Photonuclear and Hadronic Reactions at JLab, LEPS and J-PARC
(D. Tadeschi, T. Nakano, O. Hashimoto, and B. Gibson)
1WG: Investigations of Glue and the Physics and Prospects of the Electron Ion Collider
(J-P Chen and T. A. Shibata)
2WG: Transverse Spin and Transverse Structure of the Nucleon
(Y. Miyachi and A. Deshpande)
1WH/2WH: The Expanding Future of High Energy Nuclear Physics at LHC and RHIC
(K. Shigaki, M. Asakawa, X-N Wang, and S. Mioduszewski)

Invited Sessions

Six invited sessions were agreed upon and organized by members of the Program Committee, as indicated below in parentheses:

BA: Neutrinos and Fundamental Symmetries
(B. Holstein, N. Saito, and J. Wilkerson)
CA: Correlations in Structure up to and beyond Bound Limits
(K. Yabana, S. Shimoura, H. Sakurai, K. Jones, R. Casten, and J. Carlson)
DA: Recent Progress in Nuclear Astrophysics
(C. Horowitz, C. Iliadis, H. Sakurai, and R. Tribble)
EA: Strangeness in Nuclear Physics
KA: The Next Decade of Probing Hot and Dense Nuclear Matter
(S. Mioduszewski, J. Nagle, and A. Ohnishi)
LA: Spin Structure of the Nucleon
(N. Saito and Z-E. Meziani)

MINI-SYMPOSIA

Fourteen mini-symposia were organized by a number of DNP and JPS members in combination with members of the Program Committee:

14a Direct Reactions Involving Unstable Nuclei
(T. Nakamura, R. Tribble, and S. Shimoura),
KH & LH
14b Developments on Re-accelerated Rare Isotope Beam Physics
(H. Sakurai, M. Wada, and B. Sherrill),
BE & CE
14c The Three-nucleon Force in Few-body Scattering and Reactions
(B. Gibson and S. Oryu), CH & DH
14d Nuclear Physics in Stars
(C. Horowitz, C. Iliadis, H. Sakurai, and R. Tribble), BG & CG
14e Probing fundamental symmetries with nuclei, neutrons, muons and atoms
(B. Holstein, N. Saito, and J. Wilkerson), CK, DK, EK & KK
14f Electromagnetic Form Factors - from the Nucleon to Nuclei
(T. Suda, B. Wojtsekhowski, and M. Sargsian), BF & CF
14g Hadron Structure and QCD in High Energy Processes
(Y. Goto, M. Perdekamp, and M. Sargsian), DF, EF, KF & LF
14h Strangeness in Stellar Systems
(B. Gibson and A. Ohnishi), LE
14i Meson-Nucleus Systems and the Partial Restoration of Chiral Symmetry
(S. Hirenzaki and Z-E. Meziani), CD & DD
14j Precision Lattice Gauge Theory
(S. Aoki, F. Karsch, L. McLerran, S. Ohta, K.Originos, S. Sasaki, and A. Hosaka), DE & EE
14k Heavy Flavor and Hard Probes in the Quark Gluon Plasma
(S. Mioduszewski, J. Nagle, A. Ohnishi, and S. Esumi), BB & CB
14l Thermal and Collective Properties of the Quark Gluon Plasma
(S. Mioduszewski, J. Nagle, A. Ohnishi, and S. Esumi), CC & DC
14m Mapping the QCD phase diagrams
(S. Mioduszewski, J. Nagle, A. Ohnishi, and S. Esumi), DB & EB
14n Progress in Strangeness Physics
(E. Hiyama and B. Gibson), BJ & CJ

PROGRAM COMMITTEE

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Hiroyoshi Sakurai, RIKEN
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Makoto Oka\(^2\), Tokyo Inst. Tech.
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Akira Ohnishi, YITP, Kyoto U
Naohito Saito, KEK

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CONFERENCE COORDINATOR

Complete Conference Coordinators, Inc.
1300 Iroquois Ave., Suite 160
Naperville, IL 60563
Phone: 630-637-8100
Fax: 630-416-3333
info@cccmeetings.com
www.cccmeetings.com