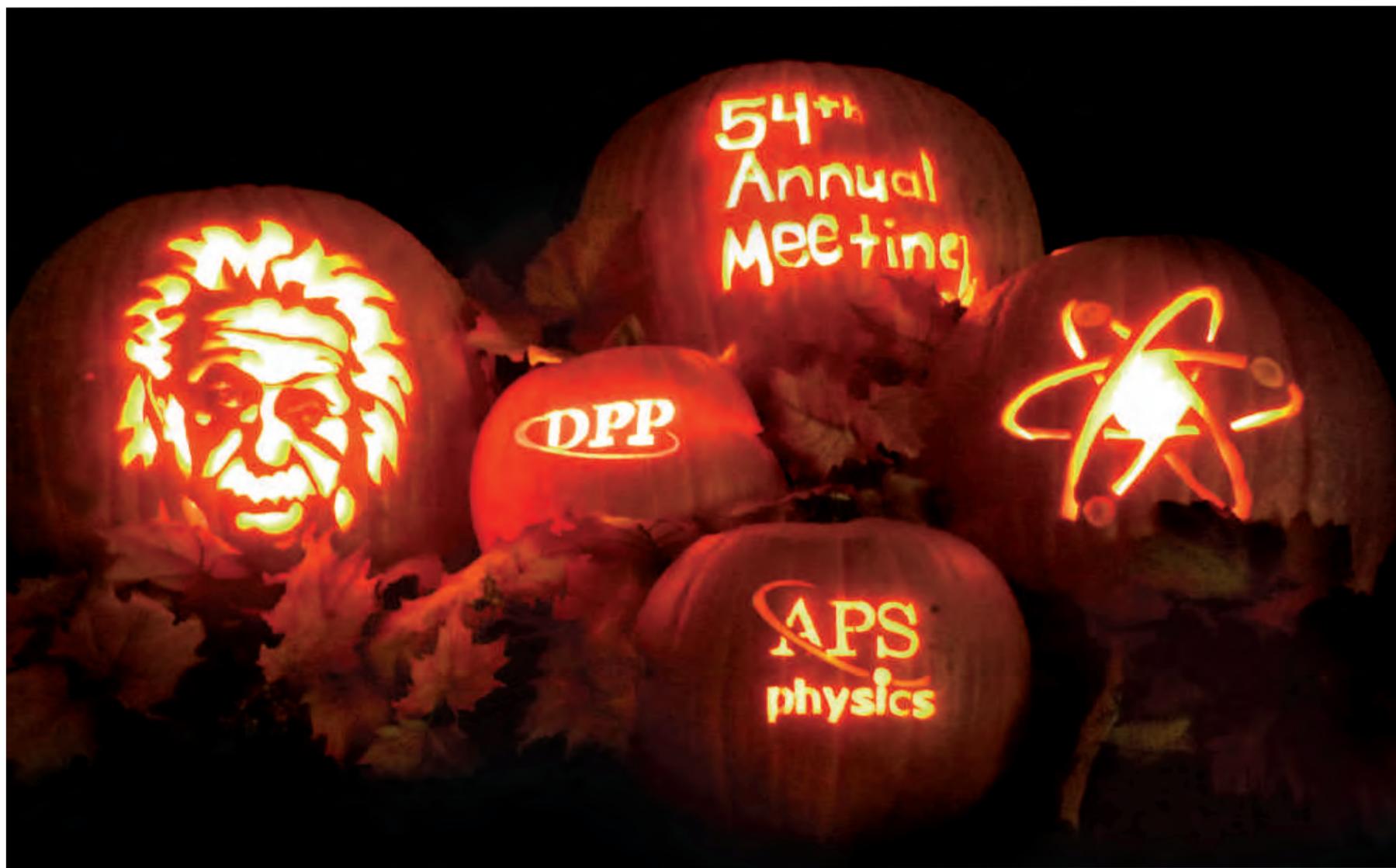


The DPP Chronicle

Providence, Rhode Island

A Division of The American Physical Society

October 29 - November 2, 2012



Jack-O-Lantern Spectacular, Roger Williams Park Zoo, 1000 Elmwood Ave., Providence RI. 6-11pm, last admission at 10pm.

During the month of October a truly one-of-a-kind autumnal display comes to Roger Williams Park Zoo. Over 5,000 illuminated Jack-O-Lanterns add their festive light

to a wetland trail, with nearly 100 of the pumpkins carved into insanely detailed works of art. The Jack-O-Lanterns are placed in themed groups compete with their own sound track, the culmination of which is the hundreds of carved pumpkins making up the "Laughing Tree" display.

Touted by locals and tourists alike as "spectacular", it

feels good knowing that the entrance fee goes to support the Zoo's education and conservation efforts.

Event Prices: \$12 for adults and \$10 for children Monday-Thursday, \$15 for adults and \$13 for children Friday-Sunday.

James Clerk Maxwell Prize for Plasma Physics

"For Pioneering, and seminal contributions to, the field of dusty plasmas, including work leading to the discovery of plasma crystals, to an explanation for the complicated structure of Saturn's rings, and to microgravity dusty plasma experiments conducted first on parabolic-trajectory flights and then on the International Space Station."

Liu Chen
University of California, Irvine



Professor Liu Chen received his Bachelor's degree from National Taiwan University in 1966, and his Ph.D. from University of California at Berkeley in 1972. From 1972 to 1974, he was a postdoctoral staff member at Bell Laboratories, Murray Hill, New Jersey. In 1974, he joined Princeton Plasma Physics Laboratory of Princeton University as a research scientist, and, later, also became a faculty member in the Department of Astrophysical Sciences. In 1993, he was appointed a Full Professor in the Department of Physics and Astronomy of University of California at Irvine, and, in March 2012, became an Above-Scale Professor Emeritus. Currently, he is a Professor of Physics and the Director of Institute for Fusion Theory and Simulation of Zhejiang University, Hangzhou, China. Professor Liu Chen is a theoretical plasma physicist with broad research interests. His current research is focused on waves, instabilities, and turbulence in magnetized laboratory and space plasmas; as well as nonlinear dynamics of coherent high-power radiation devices. In 2004, he received the American Physical Society

(APS) Award for Excellence in Plasma Physics Research. In 2008, he was awarded the Hannes Alfvén Prize by the European Physical Society (EPS). He is a Fellow of APS, American Association for the Advancement of Science (AAAS), as well as American Geophysical Union (AGU).

John Dawson Award for Excellence in Plasma Physics Research

"For predicting and demonstrating the technique of laser scatter on self-generated plasma-optics gratings that enables generation and redirection of high-energy laser beams important for indirect drive inertial confinement fusion and high-power laser-matter interactions."

Debra Ann Callahan
Lawrence Livermore National Laboratory



Debbie Callahan received her BS degree in Physics and Mathematics from the University of Denver in 1985. After spending two years at Cornell University, she moved to the University of California, Davis to complete her PhD under the direction of Bruce Langdon and John DeGroot. Her thesis research was carried out at Lawrence Livermore National Laboratory (LLNL). She completed her PhD in 2003 and has continued to work on inertial confinement fusion and inertial fusion energy at LLNL.

Debbie is currently a group leader for ICF/IFE target design within AX Division in the Weapons and Complex Integration Directorate, and the target design leader for

the Integrated Tuning Campaign within the National Ignition Campaign (NIC) on NIF. She has been involved with the National Ignition Campaign experiments since they started in 2009. Prior to NIF experiments, she led the "Hohlraum Point Design Working Group" within NIC to develop the point design hohlraum for ignition. Debbie recently completed a three-year term on the Executive Committee of the American Physical Society Division of Plasma Physics.

George Kyrala
Los Alamos National Laboratory



George Kyrala received his bachelor's degree from the American University in Beirut, Lebanon, and his PhD in atomic physics from Yale University, where he was a Gibbs Fellow. He joined the High Energy Density group of the Physics Division at Los Alamos in 1979. Over the next 15 years, George worked with researchers conducting experiments at the University of Rochester's OMEGA laser and developed new physics models run on supercomputers to better understand the phenomenon. This led to the conclusion that the energy transfer process could be controlled using slight adjustments to the laser beams' wavelengths, and even be used as a novel tool to tune the implosion symmetry of LLNL's National Ignition Facility (NIF) targets. George is an expert on ultra high-speed diagnostics of lasers, X-rays and the plasmas generated. He is being recognized for work on a far-reaching discovery about laser-matter interaction, which has important implications for NIF.

George is a Fellow of the American Physical Society and the International Society

for Optical Engineers. He has received many international awards, including the Photosonics Award and the Harold E. Edgerton Award.

Pierre Michel
Lawrence Livermore National Laboratory



Dr. Pierre Michel received undergraduate degrees in Physics and Photonics from Strasbourg University (France) in 2000; he got his Ph.D. with highest honors from Ecole Polytechnique, Paris in 2003, for his work on laser-plasma interactions for inertial confinement fusion applications. From 2004 to 2006 he worked on laser-plasma acceleration of particles and its applications for x-ray sources at the LOASIS program of Lawrence Berkeley National Laboratory, where he was awarded the "A.M. Sessler" post-doctoral fellowship. He then joined Lawrence Livermore National Laboratory in 2006 where he is currently a staff scientist pursuing numerical, theoretical and some experimental work on laser-plasma interactions. In particular, he conducted numerical and theoretical work on the physics of power transfer between laser beams crossing in plasmas and its possible applications for symmetry tuning on the National Ignition Facility; this scheme was experimentally demonstrated a year later and has been routinely used since then. Dr. Michel has been leading the National Ignition Campaign's "laser-plasma interaction working group" since 2009. He is a member of the American Physical Society.

Robert Kirkwood
Lawrence Livermore National
Laboratory

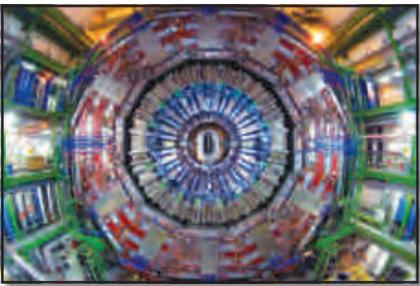


Robert Kirkwood received his Bachelors and Masters degrees in Electrical Engineering from UCLA in 1982 and 1984 (under F. F. Chen and R. J. Taylor). He worked at TRW

corporation from 1984 to 1985 designing particle diagnostics for magnetic mirrors and where he received a graduate fellowship. He received his doctoral degree from MIT in Applied Plasma Physics in 1989, (under Ian Hutchinson) where he developed the first cyclotron absorption diagnostics for tokamaks, and was awarded the Marshall N. Rosenbluth Outstanding Doctoral Thesis Award (previously the Simon Ramo Award) from the American Physical Society. He later worked at Caltech developing wave-current drive and as staff physicist at the Air Force Phillips Lab remotely studying energetic particles on Shuttle flights. Dr. Kirkwood moved to the Lawrence Livermore National Laboratory in 1994 to help initiate the National Ignition Facility program. There he led experiments on multi-beam interactions which led to wavelength tuning of drive symmetry on NIF, and current models of multi-beam backscatter. He directed independent programs on plasma pulse compression and amplification, and developed optical and x-ray diagnostics techniques for NIF. Dr. Kirkwood has been a member of the APS Division of Plasma Physics since 1989 serving on numerous divisional committees.

Nathan Meezan
Lawrence Livermore National
Laboratory

Edward Williams
Lawrence Livermore National
Laboratory



The Large Hadron Collider (LHC) is the world's largest and highest-energy particle accelerator. The LHC lies in a tunnel 27 kilometers (17 miles) in circumference, as deep as 175 meters (574 feet) beneath the Franco-Swiss border near Geneva, Switzerland. It was built by the European Organization for Nuclear Research (CERN) from 1998 to 2008 in collaboration with over 10,000 scientists and engineers from over 100 countries, as well as hundreds of universities and laboratories. The LHC is expected to address some of the most fundamental

questions of physics, advancing human understanding of the deepest laws of nature. It contains six detectors each designed for specific kinds of exploration.

Marshall N. Rosenbluth
Outstanding Doctoral
Thesis Award

"For measurements and theory of the ultrafast, high field, nonlinear response of gases near the ionization threshold, characterization of femtosecond plasma filaments, and demonstration that femtosecond filamentation requires plasma stabilization."

Yu-Hsin Chen
Lawrence Livermore National
Laboratory



Dr. Yu-hsin Chen received the B.S. degree in electrical engineering and the M.S. in electro-optical engineering in 2000 and 2002, respectively, both from National Taiwan University. He obtained his Ph.D. degree in electrical engineering from University of Maryland, College Park in 2011. His dissertation investigated the effect of ultrafast optical nonlinearities of air molecules on laser filamentation, and demonstrated the direct, time- and space-resolved measurement of plasma density in femtosecond laser-produced filament in atmosphere for the first time. This work was conducted in Intense Laser-Matter Interactions Group advised by Prof. Howard Milchberg at University of Maryland.

Dr. Chen is currently working on ultra-intense short pulse laser technologies at Lawrence Livermore National Laboratory. He is a member of the American Physical Society.

Mobile App

APS and DPP are pleased to announce DPP 2012 mobile meeting app available to all attendees. After downloading the app to your mobile device, you will be able to read the abstracts, view the speaker index, create a personal schedule of presentations at the meeting, and see maps of the Rhode Island Convention Center. For instructions on how to download the app, please see the flyers at the DPP Registration Desk or at the APS DPP Meeting Information Booth.



HEDSA Annual Symposium
on High Energy Density
Laboratory Plasmas

Sunday, October 28
7:00 p.m. – 10:00 p.m.
Room 554AB, RICC

The program includes the following presentations:

7:30 PM "Large-scale molecular dynamics simulations of charged particle stopping in strongly coupled plasmas: definitive tests of plasma kinetic theories", Michael Murillo, Los Alamos National Laboratory.

8:00 PM "Generation of scaled protogalactic seed magnetic fields in laser-produced shock waves", Gianluca Gregori, Oxford University UK.

8:30 PM "X-ray Thomson Scattering: Incisive probe for warm dense matter", Sean Regan, Laboratory for Laser Energetics, University of Rochester.

9:00 PM "Richtmyer-Meshkov jet formation and areal mass oscillations triggered by HED shock waves", Alexander "Sasha" Velikovich, Naval Research Laboratory.

Coffee Breaks in RICC

Mornings:
Ballroom Prefunction, 5th level
Monday-Friday 9:00 a.m. to 9:30 a.m.

Afternoons:
Ballroom Prefunction, 5th level
& Exhibition Hall BC, 3rd level
Monday-Thursday 3:00 p.m. to 3:30 p.m.

Note: Beverages will not be replenished.

Registration Desk
Exhibition Hall D, RICC

Sunday, Oct. 28, 2:00 p.m. - 7:00 p.m.
Monday, Oct. 29, 7:00 a.m. - 5:00 p.m.
Tuesday, Oct. 30, 7:00 a.m. - 4:00 p.m.
Wednesday, Oct. 31, 7:00 a.m. - 3:00 p.m.
Thursday, Nov. 1, 7:00 a.m. - 3:00 p.m.
Friday, Nov. 2, 7:00 a.m. - 10:00 a.m.

Speaker Ready Room Hours
Room 558AB, RICC

Monday, Oct. 29, 8:00 a.m. - 5:00 p.m.
Tuesday, Oct. 30, 8:00 a.m. - 5:00 p.m.
Wednesday, Oct. 31, 8:00 a.m. - 5:00 p.m.
Thursday, Nov. 1, 8:00 a.m. - 5:00 p.m.
Friday, Nov. 2, 8:00 a.m. - 11:00 a.m.

Review Talks

Review talks begin at 8:00 a.m.
Monday – Friday
Ballroom ADE, RICC

Rhode Island is the smallest state in size in the United States. It covers an area of 1,214 square miles. Its distances North to South are 48 miles and East to West 37 miles.

Caregiver/Child Room
Room 528, 5th Level, RICC

A caregiver/child room is available in the Rhode Island Convention Center near the area of the oral presentations for parents/caregivers to use at no cost to attendees. The room is intended for parents/caregivers who have brought infants or young children to the annual meeting. The room will be furnished with comfortable furniture and with a limited amount of toys, natural organic snacks, and beverages for young children. Note that APS and DPP do not assume responsibility for providing supervised child care.

Caregiver/Children's Room hours:

Monday, Oct. 29, 8:00 a.m. - 5:00 p.m.
Tuesday, Oct. 30, 8:00 a.m. - 5:00 p.m.
Wednesday, Oct. 31, 8:00 a.m. - 5:00 p.m.
Thursday, Nov. 1, 8:00 a.m. - 5:00 p.m.
Friday, Nov. 2, 8:00 a.m. - 12:00 p.m.

Internet Pavilion

Exhibition Hall BC, RICC

Note: DPP offers internet access to attendees as a service.

Sunday, Oct. 28 3:00 p.m. - 8:00 p.m.
Monday, Oct. 29 7:00 a.m. - 6:00 p.m.
Tuesday, Oct. 30 7:00 a.m. - 6:00 p.m.
Wednesday, Oct. 31 7:00 a.m. - 6:00 p.m.
Thursday, Nov. 1 7:00 a.m. - 6:00 p.m.
Friday, Nov. 2 7:00 a.m. - 1:00 p.m.

Wireless Access

Available in Exhibition Hall BC (compliments of DPP).

Copying and Duplicating Services

Rhode Island Convention Center,
Business Center
1 Sabin Street
(401)458-6103

Fed-Ex Office Ship Center
50 Kennedy Plaza
(401)331-1990
www.fedex.com

Sevice Point
303 Eddy Street
(401) 278-4000

Minuteman Press
88 Orange Street
(401)351-0500
www.providence.minutemanpress.com

Housing Information

The Westin Providence

One West Exchange Street, Providence, Rhode Island 02903

(\$183 single/double; \$121 gov't rate)

Hilton Providence

21 Atwells Avenue, Providence, Rhode Island 02903 (\$183 single/double, \$213 triple, \$243 quad; Prevailing gov't rate)

Marriott Courtyard
Providence Downtown

32 Exchange Terrace at Memorial Blvd., Providence, Rhode Island 02903 (\$156 single/double; \$121 gov't rate)

Providence Biltmore

11 Dorrance Street, Providence, Rhode Island 02903 (\$151 single/double; \$121 gov't rate)

Renaissance Providence
Downtown

5 Avenue of the Arts, Providence, Rhode Island 02903 (\$169 single/double; \$121 gov't rate)

All guest room rates are subject to 13% local tax.

Jerimoth Hill is the state's highest point at 812 feet above sea level.

Stay for the Invited and Postdeadline Talks... Win a Prize in a Raffle!



Apple Ipad III 32GB WiFi
Impress your peers with your style!

When you register at the DPP Meeting Registration Desk, you will receive a numbered ticket stub for a raffle that takes place

AFTER the Postdeadline Talks on Friday!

After the conclusion of the Friday morning sessions, on November 2 in Ballroom DE of the Convention Center, the DPP chair, Cary Forest, will draw three raffle tickets at random. The winners of the drawing must be present to win.



Bose QC3 Headphones
Impress your peers on the flight home!



G-RAID mini 1 TB Hard Drive
Impress your peers with your mini Hard Drive Raid Array!



Upon viewing the Seal and flag of Rhode Island you will immediately notice the word "Hope" as well as the accompanying image of an anchor. There is no official documentation explaining why this word was chosen, or why the symbol of the anchor was decided upon. The date was May 4, 1664 when the Rhode Island General Assembly first adopted a seal for the colony featuring an anchor and the word "Hope" above it. In searching for an explanation as to why the word "Hope" was chosen, one may look to the historical notes of Howard M. Chapin. In 1930 Chapin published a work titled *Illustrations Of The Seals, Arms And Flags Of Rhode Island*, printed by the Rhode Island Historical Society. Chapin writes that the words and emblems on the Seal and flag were most likely inspired by the biblical phrase contained in Hebrews, Chapter 6, verses 18 and 19, "hope we have as an anchor of the soul" (pp 4-5).

Divine Providence: The Best Treats & Eats in Town

Boat House
227 Schooner Dr, Tiverton, RI
(401)624-6300,
www.boathusetiverton.com

Featuring fresh seafood the dishes at this popular eatery are known for being uncomplicated but tasty. Patrons recommend the delicious raw oysters and seafood stew.

CAV
14 Imperial Place,
Providence, RI
(401)751-9164
www.cavrestaraunt.com

The bohemian vibe in this eclectic eatery extends from the name (which is an acronym for Cocktails, Antiques and Victuals), to the décor and doesn't skip the food. Popular dishes include the pistachio crusted crab cakes with fried lotus root and roasted venison rack with potato and fruit samosa.

Evelyn's Drive-In
2335 Main Road, Tiverton, RI
(401)624-3100
www.evelynsdrivein.com

They say that no trip to Rhode Island is complete without a visit to an authentic clam shack. Locals will tell you to head to Evelyn's to fill your belly with seaside essentials. The menu includes favorites like calamari, lobster rolls and yes, fried clams.

Cafe Nuovo
1 Citizen's Plaza, Providence, RI
(401)421-2525
www.cafenuovo.com

Overlooking the confluence of the Moshassuck and Woonasquatucket rivers, this spacious dining room features Italian fare with hints of inspiration from the flavors of Greece and Portugal. Dishes like their macadamia and goat cheese crusted rack of lamb will leave your taste buds reeling with culinary delight.

MuMu
220 Atwells Avenue, Providence, RI
(401)369-7040

Nestled among the most Italian part of Federal Hill is one of the most popular Chinese Restaurants in the area. Boasting a menu that goes on "forever", try the delicious dim sum and specialties like Sichuan Chili ravioli and Peking Duck.

Glossary of Rhode Island food specialties:

Stuffies- coming in as many versions as there are cooks, most "stuffies" are a variation of chopped clams, breadcrumbs and other seasonings stuffed into two shell halves and baked. Known for being extremely tasty.

Johnnycakes (or Jonnycakes)- standard breakfast fare for Rhode Islanders, Johnnycakes range in consistency from thin delicate crepes to thick griddlecakes. They are different from their cousins the pancake because of their primary ingredient, cornmeal.

Clam cakes- these aren't actually cakes, but deep-fried fritters. Don't expect to find much clam in these crunchy cakes, they are virtually absent!

Coffee milk- one of the obligatory beverages to go along with "Rhody Chow", this sweet beverage is made with a condensed coffee syrup.

Rhode Island Clam Chowder- different from its Manhattan and New England cousins, this clam chowder is a clear broth-based soup.

Invited Speaker Poster Sessions Exhibition Hall BC, RICC

Poster versions of review, invited, and tutorial papers are optional and are scheduled Monday through Friday, in the following half-day session, in a designated area of Exhibition Hall BC. For example, the Monday morning review and invited talks may also be presented as posters in the Monday afternoon poster session. This option will be available on Monday morning for invited papers scheduled on Friday morning, November 2.

Higher Education in Rhode Island

Rhode Island doesn't skimp on the amount of Colleges and Universities in its borders. Though it may be the smallest state in the union, it is home to 12 institutions of higher learning. One of the most well known is the only Ivy League school in Rhode Island, Brown University, which was founded in 1764 before the American Revolution.

The state's three public institutions include two public universities, the University of Rhode Island and Rhode Island College. These two schools boast over 25,000 enrolled students

combined. The Community College of Rhode Island offers degrees at six locations which is impressive considering those six locations all lie within just 1,214 square miles!

Newport, Rhode Island is home to the Naval War College which is operated by the United States Navy. The college is an education and research institution with just 550 enrolled students. Specializing in developing ideas for naval warfare the college passes these ideas and findings along to officers of the Navy.

Rhode Island is also home to Bryant University, Johnson & Wales University, the New England Institute of Technology, Rhode Island School of Design, Roger Williams University and Salve Regina University.

APS and DPP Membership Booth & Souvenir Store

Monday, October 29 -
Wednesday, November 1
8:00 a.m. – 5:00 p.m.

Exhibition Hall
Prefunction, RICC

The APS Membership Department staff will be on hand to answer questions about APS and DPP membership. Stop by for information on how to become a member or renew your membership, receive journal subscriptions, and purchase fun and practical items in the store. Joining APS and DPP is a perfect way to stay connected with the most recent developments in the physics world. Browse our selection of t-shirts, caps, and more.

Companions' Breakfast

Monday, October 29
8:30 a.m. – 11:00 a.m.

Rotunda, RICC

Note: Breakfast is only for companions and their children.

The complimentary Companions' Breakfast is an opportunity to join other companions attending the DPP annual meeting. A representative from the Providence area will provide information about what to see and do while visiting the city.

St. Mary's, Rhode Island's oldest Roman Catholic parish, was founded in 1828. The church is best known as the site of the wedding of Jacqueline Bouvier to John Fitzgerald Kennedy in 1953.

Contact Congress

(Sponsored by APS Washington DC Office)

Monday, October 29 &
Tuesday, October 30
9:00 a.m. – 5:00 p.m.

Exabition Hall
Prefunction, RICC

Stop by the Contact Congress desk to sign your name to letters addressed to your Congressional delegation on the importance of federal funding for basic research. It takes only a couple of minutes. By doing so, you are making your voice heard in Washington and helping to influence the funding levels for physics research and education. To amplify the impact, the APS Washington DC Office follows up each letter with a call or visit to congressional staff. The strongest and most persuasive advocates on Capitol Hill come from a Senator or Representative's constituents. That means you! If you live in the United States, you are qualified to write to your members of Congress.

If you have any questions about what is happening in Washington, just stop by the Contact Congress desk to ask the experts.

Job Fair

Sponsored by APS DPP

Monday, October 29,
10:00 a.m.-4:00 p.m.

Tuesday, October 30,
10:00 a.m.-4:00 p.m.

Wednesday, October 31,
10:00 a.m.-2:00 p.m.

Exhibition Hall BC, RICC

(Interviews to be held adjacent to Job Fair)

The Job Fair is the best place to connect with employers and job seekers from all areas of plasma physics such as astrophysics, beams, computer systems, nuclear physics, precision measurement, and many more areas of interest.

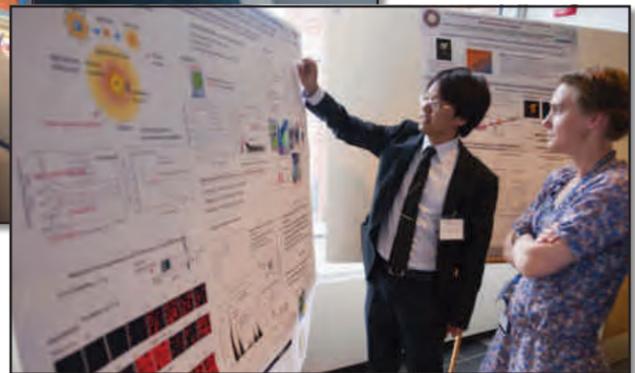
Attendees are encouraged to visit the Job Fair to take advantage of our many recruiting services:

- Showcase your company with a Recruitment Exhibit
- Search our job and resume database
- Network and interview with companies and job-candidates onsite
- Create alerts to inform you of new resumes and jobs
- Manage your interview calendar online

For additional information contact Crystal Bailey (bailey@aps.org).



participation!



OMEGA Users Group

Tuesday, October 30
5:00 p.m. – 6:30 p.m.

554AB, RICC

The annual OMEGA Users Group meeting will be held on October 30 in 554AB, RICC. We will meet to reassess enhancing and extending current research and collaborations as discussed at our last users workshop (April, 25-27 2012); to briefly discuss the agenda and plans for the upcoming OMEGA Users Workshop in 2013; and to address general Users issues. We look forward to your

**Women in Plasma
Physics Luncheon**
Monday, October 29
12:30 p.m. – 2:00 p.m.
Rotunda, RICC

To attend the luncheon, mark the appropriate space on the on-site registration form. The lunch tickets are \$25 for regular attendees and \$10 for graduate and undergraduate students. The lunch cost is partially subsidized by DPP. Yuan Ping and Renee Horton will give short presentations.



Yuan Ping (LLNL) received the 2011 Katherine Weimer Award "for pioneering experiments to explore the interaction of high-intensity laser light with matter, including the demonstration of amplification of ultrashort laser pulses by the resonant Raman scheme." That award, established in 2001, recognizes the contribution and potential of women in plasma science and is offered every three years to a female physicist within the first 10 years of her career.



Renee Horton obtained her Ph.D. in materials science from the Department of Physics and Astronomy at the University of Alabama in 2011. She received the Trailblazer Award at the 2010 Black Engineer of the Year Awards STEM Global Competiveness Conference. She returned to her education after taking 10 years off to raise her three children.

After their remarks, Yuan and Renee will answer questions from the luncheon attendees.

**Committee on Women in
Plasma Physics**

Experiences of an international trailblazer as a woman physicist and her nontraditional path to a Ph.D.

Monday, October 29
5:30 p.m. – 6:30 p.m.
551AB, RICC

K. Renee Horton will tell us about her experiences as someone who got married quite young, had three kids, had various careers, then decided to go back to school to complete an undergraduate degree in electrical engineering in 2002, followed by a Ph.D. in materials science in 2011. Renee has served the physics community as a member of the U.S. delegation team to the 2nd and 3rd International Conference on Women in Physics in 2005 (in Brazil) and in 2008 (in Korea) and as a member of the organizing committee of the 4th international conference in that series in 2011 (in South Africa). Renee is the proud mother of Eric, Malik, and Denise. In her spare time she enjoys photography, reading, and riding her motorcycle.

Nine Men's Misery monument in Cumberland is the oldest known monument to veterans in the United States. It was erected in memory of the colonists killed in Pierce's Fight during King Phillips War in 1676.



U H O E M C V D J E R D H S O Y A
H N M D O A I H C O F I W E T C L
S M D S W V X N K U Z S J I W O F
L N M E E L E W N M Y R R T Y L V
W I O R R L C D E T X U B R R Z E
C E T I U G A O S L P P G E O N N
B O I B S M R U N M L T I P E D Y
R U R V E O D A I F I I P O H M W
Z U R N E O L A D B I O H R T C G
T E T N J R M P T U U N E P E O S
Q A R O P E S S M E A S E C E U E
L S E G R A H C S I D T G D L P M
I N T E R F A C E X F D E U X L E
E L E C T R O M A G N E T I C I R
H E L I C O N A M S A L P D T N T
S C I M A N Y D I S X H G J R G X
S A M M H O Y A D Z J C E G N X E

Word Puzzle:
Find the following words:

ALFVEN	BURN	CONFINED
COSMIC	COUPLING	DISCHARGES
DISRUPTIONS	DIVERTOR	DUSTY
DYNAMICS	ELECTROMAGNETIC	EXTREMES
FUNDAMENTAL	HELICON	IMPLOSIONS
IMPURITY	INTERFACE	MAXWELL
PLASMA	PROPERTIES	REVIEW
ROPES	THEORY	TURBULENCE
	UNDERGRADUATE	

**University Fusion Association
(UFA) General Meeting**

Monday, October 29
7:00 p.m. – 9:00 p.m.
Ballroom DE, RICC

The UFA is an organization of approximately 200 university professors and scientists interested in promoting fusion energy science. The UFA has been at work for over 20 years (the original UFA constitution was formulated in March 1989). The role of the UFA is to support plasma science and technology in the development of a new, environmentally attractive energy source using controlled thermonuclear fusion energy. The current president of UFA is Professor David T. Anderson, University of Wisconsin. He will be replaced in 2012. Go to: <http://depts.washington.edu/ufa/home.html> for more information about UFA.

The UFA supports the study of the science of matter under extreme conditions typical of that required for sustained thermonuclear reactions. In addition, the UFA promotes the development of the knowledge and technology necessary for the production of fusion reactivity for commercial applications and electrical power production. UFA officers and executive committee members meet regularly to evaluate the role of academic research in the U.S. fusion program. The UFA president represents the interests of the academic fusion energy science research community at meetings with DoE OFES and other groups. Information is disseminated to UFA membership via electronic newsletters and an annual general meeting.

On Monday, October 29 at 7:00 p.m., the UFA will hold its annual general meeting during the APS DPP annual meeting in Providence in Ballroom DE. The UFA general meeting typically discusses issues of relevance to fusion science research in U.S. universities and the status of the U.S. fusion program. Note JD: leave 6 or 7 lines here for invited speaker text. The UFA meeting is open to members of the community and all conference attendees.

Roger Williams, founder of Rhode Island, established the first practical working model of Democracy after he was banished from Plymouth, Massachusetts because of his "extreme views" concerning freedom of speech and religion.



New England's oldest Masonic Temple in Warren was built in the 18th century with timbers from British frigates sunk in Newport Harbor during the Revolutionary War.

Mini-Conferences

Two mini-conferences are scheduled Tuesday-Thursday to be held at the Rhode Island Convention Center. Check the Epitome for the presenter start times.

**Nonlinear effects in geospace
plasmas**

Tuesday, October 30
at 9:30 a.m. & 2:00 p.m.
Room 553AB, RICC

Organizers: Evgeny Mishin and Vladimir Sotnikov (Air Force Research Laboratory, Kirtland AFB) and Gurudas Ganguli (Naval Research Laboratory)

Description: The objective of this mini-conference is to assess the contribution of nonlinear plasma processes to the dynamics of the Earth's space plasma environment (geospace) subjected to natural and man-made disturbances. Satellite and ground-based observations provided enough evidence to the important role of nonlinear plasma effects in geospace warranting a joint discussion between the geo- and plasma-physical communities. Speakers will summarize recent progress in observations, theory, and numerical and laboratory modeling of nonlinear wave processes in natural and artificial geospace plasmas and discuss future directions.

Flux ropes and 3D dynamics

Wednesday, October 31
at 9:30 a.m. & 2:00 p.m.
Thursday, November 1
at 9:30 a.m. & 2:00 p.m.

Room 553AB, RICC

Organizers: Walter Gekelman (University of California, Los Angeles), Tom Intrator (Los Alamos National Laboratory)

Description: This mini-conference spans inter disciplinary topics not ordinarily covered in the regular program. The sessions will include observers of solar, magnetosphere and astrophysical systems, those working on 3D theories and simulations of related processes, and experimentalists from the groups studying them in the laboratory. We anticipate participation from scientists who do not usually attend DPP Meetings.

These mini-conferences are organized with oral presentations plus time for questions and discussion, and may include a poster session. They will employ a question-oriented format to stimulate discussion and interaction amongst the participants.

The Flying Horse Carousel is the nation's oldest carousel. It is located in the resort town of Watch Hill.

**Town Meeting on Concerns
of Junior Scientists**

Tuesday, October 30,
12:30 p.m.-2:00 p.m.

Rotunda, RICC

The DPP Committee on Concerns of Junior Scientists (CCJS) and the APS Committee on Careers and Professional Development (CCPD) is pleased to announce a joint meeting this year, the subject of which is Career Building in Plasma Physics. The meeting starts earlier this year to accommodate a more substantial event. First, we will have a presentation by Dr. James Van Dam, Director of the Research Division of the Office of Fusion Energy Sciences at DOE. Dr. Van Dam will focus on research support opportunities available for young scientists and how these opportunities can be accessed. One particular example will be the increasing importance of International Collaborations offered in the fusion program and how young scientists can play a significant role. After time for Q&A, the meeting will move to an interactive career panel format with a panel of prominent scientists, including Professor John Cary (Tech-X), Professor Paul Cassak (West Virginia University), Dr. Yuan Ping (LLNL), Ms. Ann Satsangi (OFES), Dr. Larry Suter (LLNL/NIF), Professor Edward Thomas (Auburn University), and Dr. Van Dam (OFES). Participants will have an opportunity to sit at round tables and directly interact with the panelists about personal career objectives. Panelists will familiarize participants with various career paths available to junior scientists with an advanced degree in physics. This event will offer junior scientists an opportunity to gain some insight into choices to consider as they make career decisions.

A reproduction of the original Liberty Bell is in the entrance hall on the south entrance to the State House. It was donated to the people of the state by the United States Treasury Department in 1950, when Harry S. Truman was president. It is about 3-1/2 feet tall and the diameter of the bell at its widest part is approximately 3-1/2 feet. It is such a realistic copy that is even has a crack similar to the original Liberty Bell.

University of Wisconsin Reunion

Tuesday, October 30
5:00 p.m. – 10:00 p.m.

Location: To be Determined

Calling all Wisconsin alums, past and present faculty and researchers.

**Meet the Editors of the
APS Journals**

**Tuesday, October 30
5:00 p.m. – 7:00 p.m.**

**Ballroom Prefunction,
5th level, RICC**

The Editors of APS journals cordially invite you to join them for conversation and refreshments. Your questions, suggestions, compliments and complaints about the journals are welcome. All meeting attendees are invited.



Student Appreciation Reception

**Tuesday, October 30
6:00 p.m. – 7:00 p.m.**

Rotunda, RICC

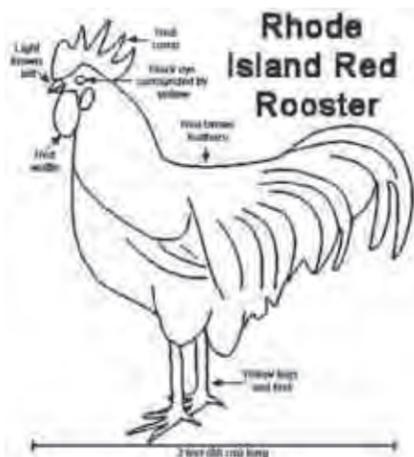
Please plan to attend a complimentary reception in honor of high school and undergraduate student participants. Professor Cary Forest, DPP Chair, cordially welcomes all DPP meeting participants, and encourages their open discussion on topics of interest to students of plasma physics. Student Poster Award recipients will be announced. Student advisors are particularly encouraged to attend. Refreshments will be served.

**Plasma Science Christian
Fellowship**

**Wednesday, October 31
6:45 a.m. – 7:45 a.m.**

Room 554AB, RICC

The Plasma Science Christian Fellowship (PSCF) is an informal affiliation of students and scientists working in plasma and fusion energy research. Formed in 2006, the PSCF seeks to provide a forum to discuss how our faith connects to our workplace experience and life as scientists. Please join us in Room 554AB, for an hour on Wednesday morning before the morning review talk. Bring your own coffee and breakfast. Contact Darren Craig (darren.craig@wheaton.edu) if you have questions or need additional information. Hope to see you there!



The State Bird of Rhode Island is unique in the fact that it was developed in the very state it is named after. Rhode Island Reds are what is known as a "utility bird", bred for its meat and eggs. Because of their egg-laying abilities and heartiness, they are a popular choice for backyard flocks.

Developed in Rhode Island & Massachusetts, early flocks often had both single and rose combed individuals because of the influence of Malay blood (the Malay is a breed of chicken originating in Asia, primarily in Northern Pakistan). In

fact, one of the foundation sires of the breed was a black-breasted red Malay cock which was imported from England. This cock is on display at the Smithsonian Institution as the father of the Rhode Island Red breed!

**Exploratory Plasma Research
Meeting (ICC Community)**

**Wednesday, October 31
12:30 p.m. – 1:30 p.m.**

Room 551AB, RICC

There will be a lunchtime meeting of the Innovative Confinement Concepts (ICC) community, now organized under a broader name: Exploratory Plasma Research. Mike Brown of Swarthmore College would like to discuss future directions for the community. A broader community would include not only U.S. DoE Fusion Energy Sciences sponsored projects but privately funded groups, materials scientists, and computational plasma scientists. We recognize that privately funded exploratory fusion endeavors are growing and our community could provide them a scientific home. We support for the mainstream fusion program including ITER, but we feel that a wise program should include some risk mitigation and have an active university component.

Save the Date! Planning is underway for the next scientific workshop. Mark your calendar for February 11-15, 2013. The workshop will be held at the Hilton Fort Worth in downtown Fort Worth, Texas.



DPP Soccer Game

East vs. West

**Wednesday, October 31
12:30 p.m.**

The annual DPP soccer match will be held mid-day on Wednesday. Meet at the DPP Registration Desk after the morning sessions, and we will take taxis or cars to a nearby soccer field. Bring your soccer clothes, shoes, etc. Everyone is welcome! At the field we will form teams. Typically we are back by the start of the afternoon session.

Sign Up: If you would like to sign-up, or if you have questions, please email Andrew Zwicker (azwicker@pppl.gov).

**HEDSA Annual
General Meeting**

**Wednesday, October 31
12:30 p.m. – 2:00 p.m.**

Room 554AB, RICC

GPAP Business Meeting

**Wednesday, October 31
12:30 p.m. – 2:00 p.m.**

Room 553AB, RICC

Call for Nominations

**Deadline:
Monday, April 1, 2013**

APS Fellowship
DPP Executive Committee Election
Maxwell Prize
John Dawson Excellence Award
Rosenbluth Ph.D. Thesis Award

**DPP Banquet
Wednesday, October 31**

**Reception: 6:30 p.m.
Narragansett Ballroom
Prefunction, The Westin**

**Banquet: 7:30 p.m.
Narragansett Ballroom**

Banquet After-Dinner Speaker
James Glanz, New York Times

**James Glanz
Banquet Speaker
Talk Title:**

**Reporting like a Maxwell's
Demon: moving between
the worlds of science and
communication to get the story.**



James Glanz is a physicist who received his Ph.D. in astrophysical sciences from Princeton University. He started his career in journalism with Research and Development

Magazine, before moving to Science magazine, the premier science research publication in the United States.

Since 1991 he has reported on astronomy, cosmology and physics as well as military and technological topics like missile defense and nuclear weapons.

He joined The New York Times in 1999. Stories he wrote with Eric Lipton and others on the World Trade Center were chosen as a finalist for a Pulitzer in explanatory journalism in 2002. Stories Lipton and Glanz wrote were also a part of the Nation Challenged package that won a Pulitzer for Public Service in 2002.

The era know as The Industrial Revolution started in Rhode Island with the development and construction in 1790 of Samuel Slater's water-powered cotton mill in Pawtucket.

**Call for Nominations for 2013
Prize and Awards**

A prize or award presented by APS DPP is one of the highest honors a physicist can receive. The DPP annually solicits nominations for one prize and two awards. The deadline for receipt of all nominations is Monday, April 1, 2013. Please take time to nominate exceptional DPP colleagues.

Anyone other than a member of the selection committee may submit one nomination or seconding letter for each prize or award in any given year.

Go to this web address: <http://www.aps.org/programs/honors/nomination.cfm> for nomination guidelines.

The nomination package must be submitted by Monday, April 1, 2013. Acknowledgement of receipt can be requested. The DPP dissertation award has other requirements in addition to those listed on the APS website, so check for descriptions of the prize and awards for which you are making a nomination.

**James Clerk Maxwell Prize
for Plasma Physics**

Howard Milchberg, Chair
University of Maryland
Phone: 301-405-4816
Email: milch@umd.edu

**John Dawson Award for Excellence in
Plasma Physics Research**

Bill Daughton, Chair
Los Alamos National Laboratory
Phone: 505-891-2243
Email: daughton@lanl.gov

**Marshall N. Rosenbluth
Outstanding Doctoral Thesis Award
in Plasma Physics**

Todd Ditmire, Chair
University of Texas
Phone: 512-471-3296
Email: tditmire@physics.utexas.edu



Plasma Sciences Expo

Thursday and Friday, November 1 & 2, 8:30 a.m. – 1:00 p.m.

for students, teachers and DPP meeting participants

Thursday, November 1, 6:00 – 8:00 p.m.

for the general public and DPP meeting participants

Exhibition Hall A, RICC

Join the Plasma Sciences Expo for an early evening of hands-on activities! During two days of the APS DPP meeting the Expo offers middle and high school students, teachers, parents and the public an opportunity to talk with scientists while visiting a variety of exhibits and interactive displays designed to teach about plasma. Special Thursday evening hours are offered for DPP members and the general public to more easily join in the fun. Meeting participants are also welcomed to participate during the day if their schedules allow.

Create arcs of lightning, manipulate plasma with magnets, observe your fluctuating body temperature, play a fusion video game, and explore optics using a laser – among other creative demonstrations. Visit exhibitor booths hosted by U.S. Department of Energy (DOE), national labs, industries, and universities from across the country. Come see how the plasma science community is engaging the next generation in the study of plasma and related physics.



Evaluation Form for 2012 APS DPP Annual Meeting

Please give us your candid opinion of the 2012 DPP annual meeting to aid in future planning. Base your evaluation on a comparison to previous APS DPP and non-APS scientific meetings. You may use a separate page for additional comments.

___ APS member ___ non-member Did you attend last year in Salt Lake City? Yes No
 workplace: ___ university ___ gov't. lab ___ industry ___ self employed ___ student ___ retired
 plasma physics subfield: ___ state (or country) of residence: ___

Rank the factors that most influenced your decision to attend this meeting:

___ meeting registration cost ___ hotel cost ___ geographical location ___ quality of program
 ___ breadth of program ___ interaction with colleagues ___ attend mini-conference ___ job fair
 Did you present a paper? ___ Did you co-author one or more papers presented by others? ___

Evaluate on a score of 5 = excellent and 1 = poor (please circle):

- Scientific content and organization**
- range of topics 5 4 3 2 1
 - review talks 5 4 3 2 1
 - invited sessions 5 4 3 2 1
 - tutorial sessions 5 4 3 2 1
 - poster sessions 5 4 3 2 1
 - mini-conferences 5 4 3 2 1
 - scheduling (overlap) 5 4 3 2 1
 - peer interaction 5 4 3 2 1
 - bulletin 5 4 3 2 1
 - chronicle content 5 4 3 2 1
 - meeting web pages 5 4 3 2 1

Meeting logistics

- location (city/state) 5 4 3 2 1
- length of meeting 5 4 3 2 1
- meeting size/layout 5 4 3 2 1
- abstract submission process 5 4 3 2 1
- registration services 5 4 3 2 1
- meeting rooms 5 4 3 2 1
- AV equipment 5 4 3 2 1
- speaker ready room 5 4 3 2 1
- job fair 5 4 3 2 1

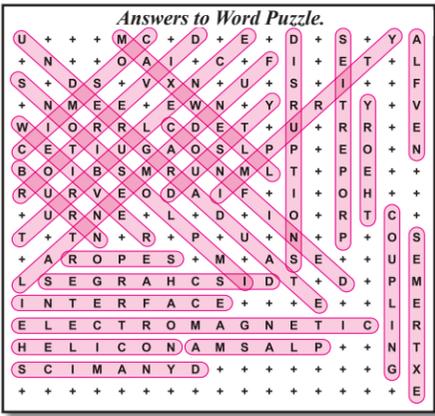
Amenities/social events

- hotel accommodations 5 4 3 2 1
- hotel location 5 4 3 2 1
- beverage breaks 5 4 3 2 1
- special events 5 4 3 2 1
- banquet 5 4 3 2 1
- email pavilion 5 4 3 2 1
- wireless service 5 4 3 2 1
- vendors 5 4 3 2 1
- education/outreach program 5 4 3 2 1

Please return this form to the DPP registration desk or email comments to:

Mark Koepke, 2013 Program Chair email: mark.koepke@mail.wvu.edu **and**
 Saralyn Stewart, DPP Administrator email: stewart@physics.utexas.edu

Notes/Doodles



Designed by:

