

The DPP Chronicle

Milwaukee, Wisconsin

A Division of The American Physical Society

October 23 - 27, 2017



James Clerk Maxwell Prize for Plasma Physics

"For many outstanding contributions to the theoretical plasma physics of low and high energy density plasmas, open and closed magnetic configurations, and laboratory and astrophysical systems."

Dmitri Ryutov
Lawrence Livermore National Laboratory



Dmitri Ryutov received his M.S. in nuclear physics from the Moscow Institute of Physics and Technology in 1962, and his Ph.D. in plasma theory from the Kurchatov Institute of Atomic Energy in 1966. From 1968 to 1993, he worked at Russia's Budker Institute of Nuclear Physics, where from 1979 to 1988, he significantly strengthened a fusion program and initiated a gas dynamic trap experiment. Dr. Ryutov was first to chair the Department of Plasma Physics at Novosibirsk University, with many of his students now working in Russia, USA and Europe. After the breakup of the Soviet Union, Dr. Ryutov moved to the U.S. and worked for 22 years at Lawrence Livermore National Laboratory, where since 2012 he has been a Distinguished Member of Technical Staff. He contributed to many areas of plasma physics, including mirrors, tokamak divertors, high-power particle beams, Z-pinches, laboratory astrophysics, solar and space physics, as well as to the x-ray optics and magnetic levitation. Dr. Ryutov has authored and co-authored influential reviews and tutorials in publications such as *Reviews of Modern Physics*, *Physics of Plasmas*, *Uspekhi Nuclear Fusion*, and other journals. His distinctions include: Corresponding Member of the Soviet (later Russian) Academy of Sciences (1976); Academician (1992); American Physical Society Fellow (1998); Institute of Physics Fellow (2004); LLNL Edward Teller Fellow (2007); and Fusion Power Associates Distinguished Career awardee

(2010). He is a co-recipient of three R&D100 awards, including for Inductrack in 2004; LCLS x-ray diagnostics in 2010; and the Snowflake divertor in 2012.

John Dawson Award for Excellence in Plasma Physics Research

"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."

Andrew James MacKinnon
Lawrence Livermore National Laboratory



Andrew MacKinnon received his B.Sc. in physics with laser science, from Heriot Watt University in 1988. From 1989-1991, he worked on the development of high power Nd: glass lasers at the Atomic Weapons Research Establishment in the UK. He then joined the plasma physics group at Imperial College in London, and was awarded his Ph.D. in 1996. Andrew carried out his post-doctoral research at Imperial College, studying relativistic self-focusing and magnetic field generation in laser-produced plasmas, using the Vulcan laser at the Rutherford Appleton Laboratory. Between 1999 and 2015, Andrew was an experimental physicist at Lawrence Livermore National Laboratory, studying the production and application of laser-driven MeV ions and the creation of high-energy-density plasmas by x-ray driven implosions. Between 2015 and 2017, he was the department head for the Matter in Extreme Conditions station at Linac Coherent Light Source at the Stanford Linear Accelerator National Laboratory, supporting high energy density experiments using high power optical and x-ray lasers. Andrew returned to LLNL in March 2017 to become a section leader at the National Ignition Facility at LLNL. He was awarded the Wallace Prize for best undergraduate research project while at Heriot-Watt University, and has been a visiting research

fellow at Queen's University in Belfast, and a visiting professor at the University of Strathclyde in Glasgow. In 2008, he became a fellow of the American Physical Society.

Chikang Li Massachusetts Institute of Technology

"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."

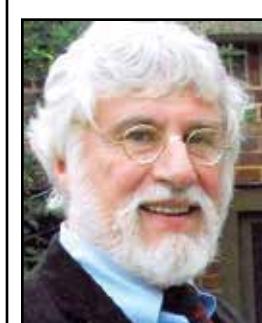


Chikang Li earned his Ph.D. in applied plasma physics in 1993 at the Massachusetts Institute of Technology after receiving a B.S. from Sichuan University in 1982. He is a senior scientist at the Plasma Science and Fusion Center at MIT, where he is also the associate head of the High-Energy-Density Physics Division, which he co-founded. His research interests are in experimental and theoretical studies of high-energy-density physics and inertial-confinement-fusion (ICF) implosions. After developing theoretical models for charged particles interacting with dense plasmas, Dr. Li helped design and build charged-particle diagnostics for laser-produced plasmas at the Omega Laser Facility and at the National Ignition Facility (NIF). He went on to use these technologies to delineate dynamics and critical parameters of ICF implosions. His recent research has focused on using proton radiography to study the generation, evolution, reconnection and instability of spontaneously generated magnetic fields; the evolution of areal density and internal electric fields in ICF implosions; the evolving fields and flows in laser-driven hohlraums; the evolution of astrophysical jets in laboratory scaled experiments; and the stopping powers in Warm Dense Matter and classic plasmas. He has authored or coauthored more than 280 peer-reviewed journal papers. Dr. Li chaired the High-Energy-Density Science Association from 2011-2012 and has been an American Physical Society fellow since 2006.

Fredrick H. Séguin

Massachusetts Institute of Technology

"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."



Fredrick Séguin received a B.S. in physics from MIT in 1969. His thesis was on group theory, and he spent two summers building particle detectors at the Stanford Linear Accelerator Center. He finished his

Ph.D. in physics at Caltech in 1974, with a thesis on stellar hydrodynamics in relativistic gravity. After a postdoctoral fellowship at the Harvard-Smithsonian Center for Astrophysics, Fredrick worked in x-ray astronomy, plasma physics and imaging science. With Richard Petrasso, he developed x-ray imaging diagnostics at MIT's Alcator-A Tokamak, studying impurity transport and plasma disruptions. He undertook projects for other institutions such as the International Atomic Energy Agency and the Smithsonian Conservation-Analytical Laboratory. For 25 years he has worked at MIT's Plasma Science and Fusion Center, studying plasma dynamics in experiments at the University of Rochester's Omega Laser Facility and the Lawrence Livermore National Laboratory's National Ignition Facility. Fredrick developed proton spectrometers and proton-emission imaging for studying 3-D distributions of plasmas and nuclear reactions in them. With Richard Petrasso and Chikang Li, he developed monoenergetic-charged-particle radiography and applied it with students and collaborators to the observation and measurement of laboratory plasma phenomena and associated fields. Subjects include plasma jet propagation scaled from astrophysical contexts (e.g. the Crab Nebula), magnetic reconnection and inertial-confinement-fusion experiments.

Marco Borghesi**The Queen's University, Belfast***"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."*

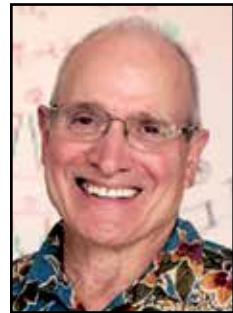
After initial studies in Italy, leading to a laurea in physics from Pisa University in 1992 and a postgraduate certificate in optical technologies from Associazione Istituzione Libera Università, in Nuoro in 1993, Marco

Borghesi ultimately obtained his Ph.D. in 1998 from the Blackett Laboratory at Imperial College in London, under the supervision of Prof. Oswald Willi. After a brief postdoctoral period at Imperial College, he became a lecturer in the School of Mathematics and Physics at Queen's University in Belfast in 1999. He was promoted to a reader in 2005 and became a professor in 2008. Professor Borghesi held the Mitsuyuki Abe Chair at the Japan Atomic Energy Agency from 2008 to 2011, and held other visiting positions with the ELI Beamlines Institute and the Institute of Physics of the Czech Republic from 2012 and 2015. His extensive publication record –more than 275 refereed publications –includes 42 papers in Physical Review Letters (PRL), two in Science, four in Nature Physics/Communications and an invited review in the Journal of Modern Physics. Professor Borghesi's research interests lay in the area of intense laser-plasma interactions, with particular expertise in laser-driven acceleration of ion beams. He has served as principal investigator in projects such as LIBRA 2007-2012 and since 2013, A-SAIL, aimed at advancing laser-ion acceleration towards future medical applications. He has contributed to the development of innovative ion acceleration schemes, and pioneered the application of laser-driven proton beams to plasma radiography as well as to high-dose rate radiobiology. Professor Borghesi is a fellow of the Institute of Physics.

Oswald Willi**Heinrich Heine University Düsseldorf***"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."*

Oswald Willi read physics at the University of Innsbruck between 1973 and 1977 and obtained a Master's (1978) and a D.Phil. degree (1980) from the University of Oxford, where he

stayed on through 1982 as a postdoctoral researcher at the Clarendon Laboratory. From 1982 until 1984, he was postdoctoral fellow at the Los Alamos National Laboratory. In 1984 he became a lecturer and a reader at the Imperial College of London before he was elevated in 1993 to a professor in Plasma Physics. Dr. Willi headed one of the major user groups of the Central Laser Facility (CLF) at the Rutherford Appleton Laboratory, where he performed measurements in the area of inertial confinement fusion. In 2001, Dr. Willi moved to the University Düsseldorf to set up a new laboratory in high-intensity femtosecond laser-plasma interactions, including the acceleration of particles and the generation of intense photon sources for various applications. Under his leadership, the ARCTURUS Laser System (two laser beams with a power of 200TW in each beam) has been established. Dr. Willi has been the coordinator of two important German research programs: the SFB/TR18 and GRK1203.

Richard D. Petrasso**Massachusetts Institute of Technology***"For pioneering use of proton radiography to reveal new aspects of flows, instabilities, and fields in high-energy-density plasmas."*

Richard D. Petrasso received his B.S. from Oregon State University in 1967 and his Ph.D. from Brandeis University in 1972. His research has focused on high-energy-density (HED) and inertial-confinement-fusion (ICF) plasmas. In the late 1980s, Dr. Petrasso collaborated with Ph.D. student Chikang Li to study the slowing of energetic charged particles in HED plasmas in order to determine plasma properties. Together with researchers from the Laboratory for Laser Energetics, the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, the Sandia National Laboratories and several MIT students and staff, Dr. Petrasso helped create diagnostics and analyses used at Omega Laser Facility and the National Ignition Facility at LLNL. This included the multiple monoenergetic particle source (MMPS), based on imploding thin-shelled (~ 2 mic) capsules (~ 400 mic diam) filled with D and 3He. Through this high-temperature (~10 keV), shock-driven implosion, fusion products of 14.7 MeV and 3.0 MeV protons, 3.6 MeV alphas, 1.0 MeV T and 0.8 MeV 3He ions are isotropically emitted (~10**9) in ~75 ps. The MMPS is being used by the HED community to radiograph and analyze fields and plasma evolution, and to study stopping power in classical and WDM plasmas. The MMPS was utilized by the 2014 and 2016 Marshall Rosenbluth Outstanding Thesis awardees, Drs. Mario Manuel and Michael Rosenberg. Dr. Petrasso is currently researching equilibration between electrons, impurity ions and fuel ions in HED plasmas (this conference). In 2013, Dr. Petrasso received the Edward Teller Medal for development of novel HED/ICF diagnostics and analyses. He heads the HED Physics Division in the MIT Plasma Science and Fusion Center, and is a fellow of the American Physical Society.

Thomas H. Stix Award for Outstanding Early Career Contributions to Plasma Physics Research*"For groundbreaking experimental and theoretical studies in tokamak stability"*

Ian Chapman
Culham Centre for Fusion Energy, United Kingdom Atomic Energy Authority



Ian Chapman became CEO of the UK Atomic Energy Authority and head of the Culham Centre for Fusion Energy in October 2016. He received his M.S. from Durham University in 2004 and a Ph.D. from Imperial College in 2008. His primary research interest is understanding and controlling macroscopic instabilities in fusion plasmas. Ian has experimented on a number of fusion devices worldwide and has developed leading numerical modelling tools. His work is characterised by a close coupling of experimental data that uses numerical modelling to explicate the underlying plasma physics and, in so doing, develop techniques for plasma control. A number of his journal publications have been included in highlights collections (Plasma Physics Controlled Fusion in

2011, Nuclear Fusion in 2012, Physics of Plasmas in 2012) and one of his papers was included in the shortlist for the Nuclear Fusion Award in 2013. Ian has published more than 110 journal papers, including three topical review papers, and has given 30 invited lead-author presentations at international conferences. His research has been recognized with many international awards, including the European Physical Society Early Career Prize in 2014, the Plasma Physics Young Scientist Prize from the Institute of Physics Paterson Medal in 2013, the International Union of Pure and Applied Physics in 2012 and the Cavendish Medal for Best early career UK physicist awarded by SET for Britain in 2011. He was made a fellow of the Institute of Physics in 2013 and became a visiting professor at Durham University in 2015.

Marshall N. Rosenbluth Outstanding Doctoral Thesis Award*"For fundamental contributions to dynamo theory, particularly the analytical and computational elucidation of the magnetic shear current effect."*

Jonathan Squire
California Institute of Technology



Jonathan Squire received a B.Sc. in physics from the University of Otago in New Zealand in 2009. During this time, he carried out various research projects into cold atoms and atom optics. In 2010, Jonathan attended graduate school at the Princeton Plasma Physics Laboratory on a Fulbright science and technology fellowship, working with several groups on both experimental and theoretical plasma physics projects before joining Amitava Bhattacharjee's group in 2013. Jonathan's dissertation research centered on turbulent plasmas in astrophysics, focusing on the magnetorotational instability and the behavior of dynamos in the presence of strong shear flows. Jonathan is now a Sherman Fairchild postdoctoral fellow in the theoretical astrophysics group at Caltech. His recent interests span a variety of topics relevant to plasmas in different space and astrophysical regimes, including the dynamics of weakly collisional high-beta plasmas, accretion disks, turbulence in the interstellar medium and the behavior of solid particles entrained in fluids and plasmas.

Fun Milwaukee Fact

Milwaukee is the only major American city to have been run by socialist mayors (for almost 38 years).

Katherine E. Weimer Award for Women in Plasma Science*"For pioneering development and characterization of x-ray sources from laser-wakefield accelerators and Compton scattering gamma-ray sources for applications in high energy density science and nuclear resonance fluorescence."*

Félicie Albert
Lawrence Livermore National Laboratory



Dr. Félicie Albert has been a scientist at the Lawrence Livermore National Laboratory in the National Ignition Facility and Photon Science directorate since 2008. She earned

her Ph.D. in physics in 2007 from the Ecole Polytechnique in France, her M.S. in Optics from the University of Central Florida in 2004, and her B.S. in engineering from the Ecole Nationale Supérieure de Physique de Marseille, France, in 2003. Dr. Albert's areas of expertise include the generation and applications of novel sources of electrons, x-rays and gamma-rays

through laser-plasma interaction, laser-wakefield acceleration, and Compton scattering. She has conducted many experiments using high-intensity lasers, including NIF, LLNL's Jupiter Laser Facility, OMEGA-EP and LCLS. She is the recipient of a 2016 DOE Early Career Research Program Award, and has been leading several Laboratory Directed Research and Development Projects at LLNL. She is the recipient of the 2017 Edouard Fabre Prize for contributions to the physics of laser-produced plasmas, and was selected by the APS as an outstanding referee in 2015. She serves on several technical panels, conference committees, and editorial boards and is regularly involved in outreach activities. She has more than 65 refereed publications and has given more than 30 invited talks at international conferences.

Fun Milwaukee Fact

The Rocky Horror Picture Show has played at the Oriental Theatre every month since January 1978.

**APS DPP Job Fair 2017**

Monday - Wednesday
Oct. 23 - 25, 9:00 a.m. - 5:00 p.m.

Thursday
October 26, 9:00 a.m. - 3:30 p.m.
Wisconsin Center, Exhibit Hall D

Are you an employer looking to hire a physicist for your science and technology jobs? Are you a physicist looking to connect with potential employers to learn about opportunities, or interview for a job? If so, you will not want to miss the APS DPP 2017 Job Fair.

Participating employers can:

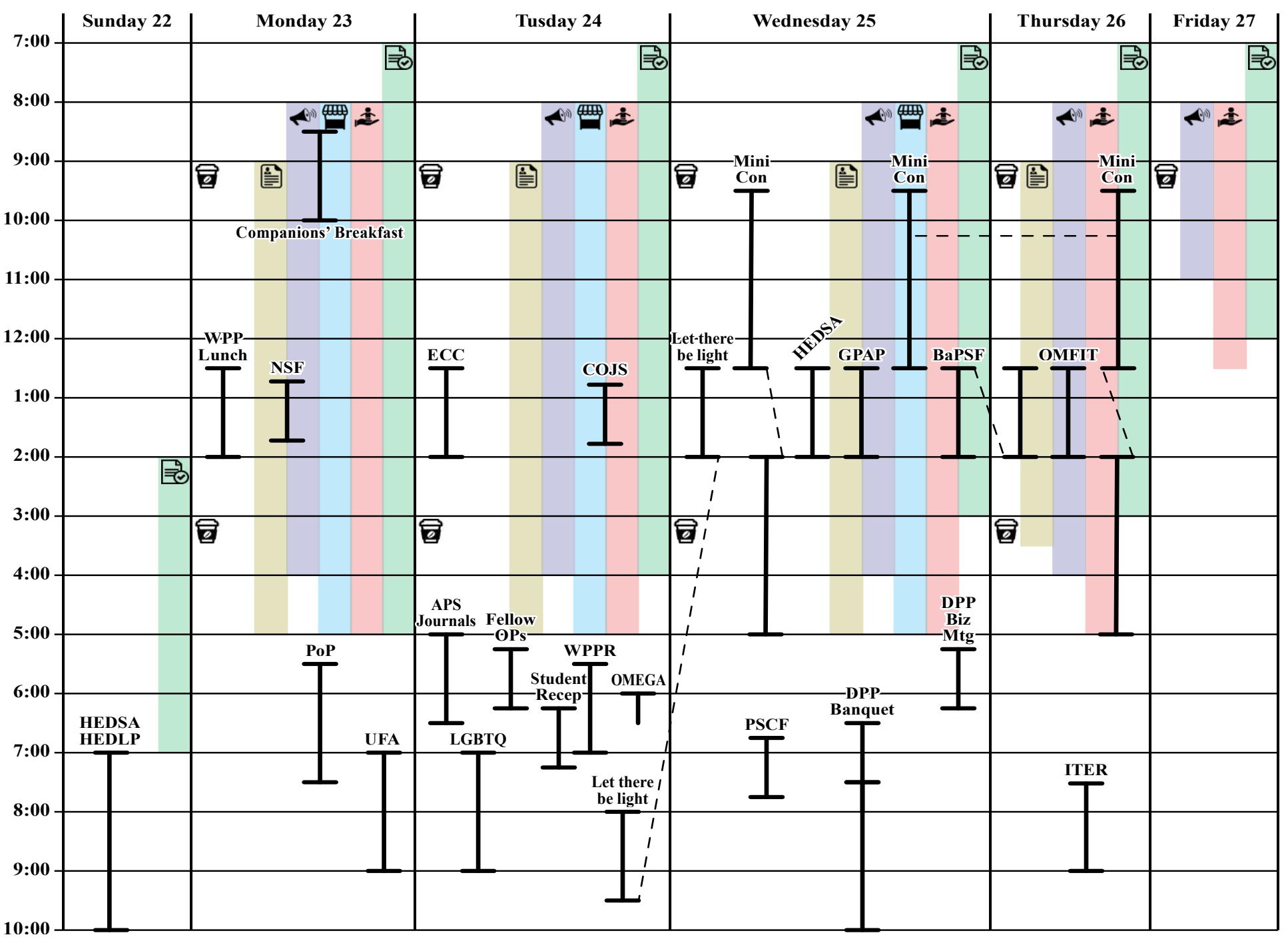
- Showcase your company with a recruitment booth
- Receive unlimited job board postings during the event
- Search the resume database for promising candidates
- Interview with potential candidates on-site

Job seekers will be able to:

- Do a targeted search of the job database to identify recruiters attending and interviewing at the meeting
- Schedule private interviews with recruiters during the meeting
- Store multiple copies of your résumé to share with participating employers

To register for the event, please stop by the Job Fair information desk in Hall D.

Meeting Events Calendar



Print Shops
Digicopy Milwaukee, Erie St.
 222 E Erie St,
 (414)291-4050
www.digicopy.net
 Monday-Thursday, 7am-10pm
 Friday, 7am-7pm
 Saturday, 9am-6pm
 Sunday, Noon-6pm

FedEx Office Print & Ship Center
 312 E Wisconsin Ave,
 (414)270-0404
local.fedex.com
 Monday-Friday, 7:30am-9pm
 Saturday & Sunday, Closed

Digital Edge Copy & Print Centers
 75 N Jackson St,
 (414) 272-3343
www.digitaledgecc.com
 Monday-Friday, 7am-5:30pm
 Saturday & Sunday, Closed

Action Digital Document Solutions, LLC
 757 N Broadway #200,
 (414)276-2679
www.actiondds.com
 Monday-Friday, 8am-5pm
 Saturday & Sunday, Closed

DPP Registration Desk Hours

Wisconsin Center, Concourse
 Sunday, Oct. 22, 2:00 p.m. - 7:00 p.m.
 Monday, Oct. 23, 7:00 a.m. - 5:00 p.m.
 Tuesday, Oct. 24, 7:00 a.m. - 4:00 p.m.
 Wednesday, Oct. 25, 7:00 a.m. - 3:00 p.m.
 Thursday, Oct. 26, 7:00 a.m. - 3:00 p.m.
 Friday, Oct. 27, 7:00 a.m. - 12:00 p.m.

Fun Milwaukee Fact

North Point Light's beacon was the tallest on the Great Lakes when the lighthouse was built in 1855.

HEDSA Symposium on High Energy Density Laboratory Plasmas
Sunday, October 22
7:00 p.m. - 10:00 p.m.
Wisconsin Center, Room 203C

The High Energy-Density Science Association (HEDSA) will hold its Annual Symposium on High Energy Density Laboratory Plasmas in Milwaukee. Six half-hour invited talks will be given focusing on the most exciting elements of the field. All attendees of the conference, especially young graduate students and post docs, are encouraged to attend for this exciting opportunity to learn about the trending directions of HED plasma physics research. The HEDSA symposium is free to all conference attendees.

Résumé Help Desk
Monday - Wednesday
October 23 - 25,
9:00 a.m. - 5:00 p.m.

Thursday, October 26
9:00 a.m. - 3:30 p.m.
Wisconsin Center, Exhibit Hall D

Back by popular demand, DPP is hosting a résumé help desk as a FREE service to meeting attendees! The Résumé Help Desk is located in the Job Fair area. Interested attendees should stop by the Job Fair desk to sign up for a 30-minute time slot to meet with a professional scientist for advice on how to construct an effective résumé. Slots will be filled on a first-come, first-served basis, so don't delay!

Fun Milwaukee Fact
 The city has 15,000 acres of park land.

Speaker Ready Room Hours
Wisconsin Center, Room 102E

Monday, Oct. 23, 8:00 a.m. - 5:00 p.m.
 Tuesday, Oct. 24, 8:00 a.m. - 5:00 p.m.
 Wednesday, Oct. 25, 8:00 a.m. - 5:00 p.m.
 Thursday, Oct. 26, 8:00 a.m. - 5:00 p.m.
 Friday, Oct. 27, 8:00 a.m. - 11:00 a.m.

Review Talks
Review talks start at 8:00 a.m.
Monday - Friday
Ballroom C, Street Level

Housing Information

Hilton Milwaukee City Center Hotel
 509 W. Wisconsin Avenue, Milwaukee,
 Wisconsin, 53203
 (\$169 single/double)
 Guest room rates are subject to 18.9% tax per night.



The prevailing government rate is \$120 plus tax, per room per night.

APS DPP Membership Booth and Store

Monday - Wednesday
October 23-25
8:00 a.m. - 5:00 p.m.

Wisconsin Center, 102 Prefunction

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, renew lapsed membership and purchase some fun and practical items. Joining APS and DPP is a perfect way to stay connected with the most recent developments in the physics community. Browse the selection of t-shirts, caps and more.

Caregiver/Children's Room
Wisconsin Center, Green Room

Monday - Thursday, Oct. 23 - 26
8:00 a.m. - 5:00 p.m.

Friday, October 27
8:00 a.m. - 12:30 p.m.

A caregiver/children's room will be available for parents and caregivers to use at no cost to attendees. The room is intended for parents or 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.

Companions' Breakfast
Monday, October 23
8:30 a.m. - 10:00 a.m.

Hilton Hotel, Juneau, 5th Floor

Note: Breakfast is only for companions and their children.

Join other companions who are attending the annual meeting for a DPP-sponsored complimentary breakfast at the Hilton Milwaukee City Center Hotel. Join other companions and reacquaint with friends from past DPP meetings. A representative from Milwaukee will attend the breakfast and share tour and site information while visiting the city.

Morning Coffee Breaks

Monday-Friday,
 9:00 a.m. - 9:30 a.m.
 Exhibit Hall D, Upper Level and
 Ballroom C Pre-Function, Street Level

Afternoon Coffee Breaks

Monday-Thursday,
 3:00 p.m. - 3:30 p.m.
 Exhibit Hall D, Upper Level and
 Room 102 Foyer, Street Level

Note: Beverages will not be replenished.

Women in Plasma Physics Luncheon

**Monday, October 23
12:30 p.m. - 2:00 p.m.**

**Hilton Hotel,
Regency Ballroom, 5th Floor**

The guest speaker is Dr. Félicie Albert of Lawrence Livermore National Laboratory, the recipient of the 2017 Katherine E. Weimer Award for Women in Plasma Science. Her talk title is "From failures to perseverance, how do you overcome obstacles as an early career plasma physicist?"

To attend the luncheon, mark the appropriate space on the DPP on-site registration form. The lunch tickets are \$25 for regular attendees and \$10 for graduate and undergraduate students. Limited seating is available. The lunch cost is partially subsidized by DPP.

Town Meeting on Plasma Physics at the National Science Foundation

**Chair: Vyacheslav Lukin,
National Science Foundation**

**Monday, October 23
12:45 p.m. - 1:45 p.m.**

Wisconsin Center, 201AB

The Town Meeting on Plasma Physics at the National Science Foundation will provide an opportunity for Q&A about the variety of NSF programs and solicitations relevant to a broad cross-section of the academic plasma science community, from graduating college seniors to senior leaders in the field, and from plasma astrophysics to basic physics to plasma engineering communities. We will discuss recent NSF-hosted events, research awards and multi-agency partnerships aimed at enabling the progress of science in plasma science and engineering. Future outlook, for plasma physics and broader plasma science support at NSF, with an emphasis on how you can help NSF to help the community, will be speculated on within the uncertainty of the federal budgeting process.

Physics of Plasmas Reception in Honor of All Authors and Invited Speakers

**Monday, October 23
5:30 p.m. - 7:30 p.m.**

**Hilton Hotel,
Crystal Ballroom, 5th Floor**

The Editors of Physics of Plasmas and AIP Publishing invite you to a reception in honor of the Invited, Tutorial, and Review speakers and the authors and referees who have contributed to the published record of the many advancements of plasma physics during the past year.

In recognition of Ronald Davidson's 25 years of exceptional service as Editor-in-Chief of Physics of Plasmas, AIP Publishing is also pleased to present the 2017 Ronald C. Davidson Award for Plasma Physics to Professor Michael Keidar of the School of Engineering and Applied Science at George Washington University.

Professor Michael Keidar recipient of the 2017 Ronald C. Davidson Award for Plasma Physics from AIP Publishing



Michael Keidar, the A. James Clark Professor of Engineering at the School of Engineering and Applied Science at George Washington University, has won the 2017 Ronald C. Davidson Award for Plasma Physics.

The award is provided by AIP Publishing in honor of Ronald Davidson's exceptional contributions as Editor-in-Chief of Physics of Plasmas for 25 years. The annual award of \$5,000 is presented in collaboration with the APS Division of Plasma Physics and recognizes outstanding plasma physics research by a Physics of Plasmas author.

Professor Michael Keidar was selected from among the most highly cited and most highly downloaded articles from Physics of Plasmas during the past five years. The paper, "Cold atmospheric plasma in cancer therapy," Phys. Plasmas, 20, 057101 (2013), was co-authored with Drs. Alex Shashurin, Olga Volotskova, Mary Ann Stepp, Priya Srinivasan, Anthony Sandler and Barry Trink. The paper presented progress in creating and understanding cold plasmas with ion temperature close to room temperature, as well as the application of cold atmospheric plasma (CAP) in cancer therapy. This invited paper was presented during the 2012 Annual Meeting of the APS Division of Plasma Physics and has motivated physicists around the world in their continued exploration of cold atmospheric plasmas and plasma applications to medicine. Michael Keidar and Eric Robert (CNRS, Paris) were Guest Editors of the Special Topic on Plasmas for Medical Applications that appeared in the December 2015 issue of Physics of Plasmas. During this meeting, Professor Keidar will present his invited lecture, "Adaptive Plasma for Cancer Therapy: Physics, Mechanism and Applications."

This year's award selection committee, consisting of Greg Howes (representing the APS-DPP) and Hiroshi Azechi, S. Peter Gary, Thomas Klinger and John Verboncoeur from the Physics of Plasmas Editorial Board, reviewed the top articles and nominated several authors from across the topical focus areas of Physics of Plasmas. The final selection was made by vote of the full Editorial Board.

The presentation of the 2017 Ronald C. Davidson Award for Plasma Physics will be presented to Professor Michael Keidar during the Physics of Plasmas Reception in honor of the invited speakers, authors and referees at 5:30 p.m. on Monday, October 23, Crystal Ballroom Foyer (on 5th Floor of the Hilton Milwaukee City Center).

Fun Milwaukee Fact

Milwaukee's Festa Italiana is one of the largest Italian festivals in the U.S., and the city also hosts the world's largest Irish Fest and North America's largest German Fest!

University Fusion Association (UFA) General Meeting

**Monday, October 23
7:00 p.m. - 9:00 p.m.**

Wisconsin Center, 102ABC

The University Fusion Association (universityfusion.org) is a nonprofit organization focused on the development of plasma science and technology for the long-term development of a new, environmentally attractive energy source using controlled thermonuclear fusion. The UFA advocates for university fusion energy and plasma science research and education by representing universities and university researchers to congressional policymakers and funding agencies, organizing planning workshops and providing community leadership. The UFA General Meeting discusses issues of relevance to fusion energy and plasma science research in U.S. universities. The UFA meeting is open to all members of the community and all conference attendees.

The current president of UFA is Professor David Maurer, Auburn University (term ends 2018). He will be replaced by the vice president and Professor John Sarff, University of Wisconsin-Madison.

Edge Coordinating Committee Annual Technical Meeting

**Tuesday, October 24
12:30 p.m. - 2:00 p.m.**

Wisconsin Center, 203AB

"The Impact of Wall Material on Pedestal Performance"

Speakers: Michael Kotschenreuther, University of Texas; Livia Casali, ORAU/DIII-D

Town Meeting on Concerns of Junior Scientists

Hosts: Eve Stenson and Elizabeth Merritt

**Tuesday, October 24
12:45 p.m. - 1:45 p.m.**

Wisconsin Center, 201AB

This event offers junior scientists the opportunity to hear from more established researchers in a Q&A panel discussion about career choices and trajectories. Topics in the past have included choosing which area to seek employment, making oneself an attractive applicant, achieving healthy work-life balance, managing career transitions, and everything in between.

We are pleased to announce this year's panel:

- Gregory G. Howes, Associate Professor, Department of Physics and Astronomy, University of Iowa
- Carolyn C. Kuranz, Project Director, Center for Laser Experimental Astrophysical Research, University of Michigan
- Samuel Lazerson, Stellarator Computational Physicist/Staff Research Physicist, Princeton Plasma Physics Laboratory
- Tammy Ma, Staff Physicist and X-Ray Analysis Group Leader for Inertial Confinement Fusion, Lawrence Livermore National Laboratory

Please plan to arrive a few minutes early, so the panel can start promptly at 12:45 pm. Hope to see you there!

Meet the Editors of the APS Journals

**Tuesday, October 24
5:00 p.m. - 6:30 p.m.**

Wisconsin Center, Ballroom Foyer

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

Fellowship Opportunities for Graduate Students in Plasma Physics

**Tuesday, October 24
5:15 p.m. - 6:15 p.m.**

Wisconsin Center, 202AB

Graduate students and undergraduates thinking about graduate school are especially welcome to attend this info session on fellowship opportunities. Representatives from DOE, NSF and NASA will be presenting on programs designed to support students at different stages of their academic careers. Recipients of these fellowships may also share their experiences.

Women in Plasma Physics Reception

**Tuesday, October 24
5:30 p.m. - 7:00 p.m.**

Hilton Hotel, Regency Ballroom, 5th Floor

The members of the Committee on Women in Plasma Physics invite you to join them for a panel discussion regarding women physicists. The panelists are: Dr. Arati Dasgupta, Naval Research Laboratory, Dr. Tammy Ma, Lawrence Livermore National Laboratory, Dr. Carolyn Kuranz, University of Michigan and Dr. Auna Moser, General Atomics. Information will be on display representing the progress of women in plasma physics. All DPP attendees are welcome.

Student Appreciation Reception

**Tuesday, October 24
6:15 p.m. - 7:15 p.m.**

Wisconsin Center, 201CD

Please plan to attend a complimentary reception in honor of high school and undergraduate students. Professor Earl Scime, DPP chair, cordially welcomes all DPP meeting attendees, and encourages open discussion on topics of interest to students of plasma physics. Student Poster Award recipients will be announced during the reception. Student advisors are particularly encouraged to attend. Refreshments will be served.

LGBTQ Networking Dinner

**Tuesday, October 24
7:00 p.m. - 9:00 p.m.**

Join fellow LGBTQ plasma physicists and their families for an informal networking dinner on Tuesday evening. We'll meet in front of the DPP Meeting Registration Desk at the Wisconsin Center at 7:00 p.m. and walk to a local restaurant. Please bring a method of payment for your dinner. RSVP encouraged, but not required.

Organizers:
Derek Schaeffer (dereks@princeton.edu)
Eli Parke (eparke@wisc.edu).

Fun Milwaukee Fact

Ever wondered where to find the world's largest dinosaur skull? Try the Milwaukee Public Museum, where a 9-foot-by-8-foot *Torosaurus* cranium, along with a partial skeleton, is on display.

Stay for the Invited Talk Session on Friday... Win a Prize in a Raffle!



Apple iPad with WiFi 128GB

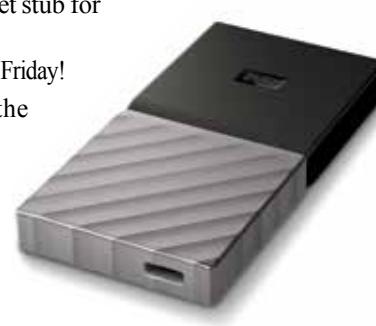


**EVEREST™ ELITE 750NC
Wireless NC headphones**

At the DPP Meeting Registration Desk ask for a numbered ticket stub for raffle that takes place

AFTER the Invited sessions on Friday!

After the conclusion of the Friday morning sessions, on October 27 in room 102ABC Earl Scime and John Cary will draw three raffle tickets at random. The winners of the drawing must be present to win.



**Western Digital 512GB
USB 3.1 Portable SSD**

Please join us at the 59th Annual Meeting of the American Physical Society Division of Plasma Physics to review the Findings and Recommendations of the 2017 OMEGA Laser Users Group Workshop

Tuesday, October 24 at 6:00 p.m. - 7:30 p.m.

Wisconsin Center, Room 203C



Fun Milwaukee Fact

The Pryor Avenue Iron Well was dug in 1882. Anyone can stop and fill up containers of mineral water for free, though it tastes heavily of iron. (Officials still check the water regularly for safety.)

LET THERE BE LIGHT
A Documentary Directed by Mila Aung-Thwin and Van Royko
Produced by EyeSteelFilm
Tuesday, Oct. 24, 8:00 p.m.
Wednesday, Oct. 25, 12:30 p.m.

Ballroom C

"A futuristic energy source that could indefinitely supply the world's power requirements provides the backdrop for this absorbing documentary."

- The Hollywood Reporter

"Let There Be Light" has been igniting audiences since its world premiere at SXSW and then followed up with a Canadian premiere this past spring. The film opened across Canada beginning in Montreal in September 2017.

For decades, fusion has been delayed and thwarted by failure, miscalculation, fraud and politics. It has been maddeningly always just out of reach, which seems to make people obsess over it all the more.

Today, fusion is being pursued with a renewed zeal, mostly because we've never needed it like we do now, and there are 37 countries currently collaborating to build the biggest experiment ever, in order to prove that fusion is viable.

Will this finally succeed? Or will the project collapse under its own massive complexity? The film chronicles the work of the passionate scientists who are struggling to make it work.

"It's rare to find people who work on projects that are designed to last decades, and these scientists would be happy if it worked in a century from now," says Co-Director Aung-Thwin. "So on a personal level, this is a deep sacrifice — but they are doing it for the chance that it helps all of humanity."

Fun Milwaukee Fact

Schlitz earned the slogan "The Beer That Made Milwaukee Famous" during the Great Chicago Fire of 1871, when numerous shipments were sent to the devastated and thirsty in Chicago.

Fun Milwaukee Fact

The U.S. Bank Center is the tallest building in the state, standing at 601 feet.

Mini-Conferences

Two mini-conferences are scheduled Wednesday and Thursday, to be held in the Wisconsin Center. Check the Epitome for the presenter start times.

All mini-conferences are organized with oral presentations plus time for Q&A. They employ a question-oriented format to stimulate discussion and interaction among attendees. Audio visual equipment and meeting space will be used in all oral sessions at the expense of DPP.

Mini-Conference on Laser-Matter Interactions: The Next Generation

Room 202DE

Wednesday, October 25
9:30 a.m. - 12:30 p.m. and
2:00 p.m. - 5:00 p.m.

Oral Sessions NM9 and PM9

Organizers: Alexey Arshiev (University of California, San Diego), Stepan Bulanov (Lawrence Berkeley National Laboratory), Mattias Marklund (Chalmers University, Sweden)

The interaction of charged particles with ultraintense electromagnetic (EM) pulses is the cornerstone of a newly emerging area of research, high-intensity particle physics, located at the intersection of quantum electrodynamics (QED) and the theory of strong EM background fields. The latter significantly alters the physics of typical QED processes, leading to effects not encountered in perturbative quantum field theory. Recently, there has been a surge of interest in these processes because of the planning and realization of new laser facilities, such as the Extreme Light Infrastructure (ELI) and the European X-ray Free Electron Laser (XFEL). The new facilities will offer unparalleled capabilities to diagnose previously unexplored regimes of lightmatter interactions. To facilitate the development of an approach and a development of a broad collaboration,

this mini-conference will bring plasma theorists, modelers and experimentalists together with experts from the strongfield physics community.

Mini-Conference on Bridging the Divide Between Space and Laboratory Plasma Physics

Room 202DE

Wednesday, October 25
9:30 a.m. - 12:30 p.m.

Poster Session NP11

Thursday, October 26
9:30 a.m. - 12:30 p.m. and
2:00 p.m. - 5:00 p.m.

Oral Sessions TM9 and UM9

Organizer: Jason TenBarge (University of Maryland)
(Sponsored by: GPAP)

The APS Topical Group in Plasma Astrophysics is dedicated to fostering cross-disciplinary interaction among plasma physicists, space physicists and astrophysicists, and this mini-conference will serve to encourage communication between these distinct communities. The guiding principle is to promote these cross-disciplinary interactions in the design of this mini-conference. The oral sessions will cover similar physics topics but from different points of view; observational, laboratory and theory. The space physics sessions will include some of the exciting new results from recent and forthcoming missions. Oral talks from laboratory plasma physicists will present space physics-relevant results and experiments and opportunities available to the space community for collaboration. Presentations from a plasma physics perspective will cover the fundamental physics common to space and laboratory plasma physics. The aim is the common themes will encourage significant interactions between plasma physicists and space physicists.

Wireless Access

WiFi will be available in the Wisconsin Center and in public space in the Hilton Milwaukee City Center Hotel.

Fun Milwaukee Fact

The beloved Milwaukee Brewers were originally based in Seattle, and were called the Seattle Pilots.

Basic Plasma Science Facility Users Group Meeting

Wednesday, October 25 or

Thursday, October 26

12:30 p.m. - 2:00 p.m.

Wisconsin Center, 202AB

The Users Group of the Basic Plasma Science Facility (BaPSF) at UCLA will hold a meeting to discuss current status and plans for the user facility and the Large Plasma Device (LAPD). A brief presentation will be made by Professor Troy Carter, the facility director, discussing machine status and opportunities for experimental time on the facility. The Chair of the BaPSF Users Group, Professor Fred Skiff (University of Iowa), will facilitate the opportunity for feedback to the facility director from current and potential users. Current users, those interested in becoming users of the facility and those just curious to learn about BaPSF are welcome to attend. It is suggested that attendees bring lunch to the meeting.

Fun Milwaukee Fact

North Point Light's beacon was the tallest on the Great Lakes when the lighthouse was built in 1855.

Mobile App

APS DPP is pleased to announce that the DPP 2017 mobile app for your Android or iOS device will again be available. This useful app contains the scientific program. You'll be able to read the abstracts, view the speaker index, view facility maps, create your own personal session schedule and more!

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.

Topical Group on Plasma Astrophysics (GPAP) Business Meeting

Wednesday, October 25

12:30 p.m. - 2:00 p.m.

Wisconsin Center, 201 AB

GPAP will hold their annual business meeting during the DPP annual meeting in Milwaukee Wisconsin. The GPAP meeting is open to all annual meeting attendees.



DPP Education Events Ready for Milwaukee

"Milwaukee is already excited about what APS-DPP has in store for the city."

DPP Education Chair Arturo Dominguez is referring to the series of education events APS-DPP is bringing to Milwaukee during the annual meeting in October. The DPP Education Outreach Planning Committee visited the conference city in April to meet local educators and discuss the education events held in conjunction with the annual meeting. Dominguez (Princeton Plasma Physics Laboratory), Committee Chair Paul Rivenberg (MIT Plasma Science and Fusion Center) and Committee Member Julie Harris (General Atomics) met with local education contacts to discuss ways of exciting the local community about plasma science education opportunities.

Even before official education events begin, Dominguez will be giving a tutorial on fusion for an after-school group at Bay View High School. Science teacher Dana Timm, who attended the planning-meeting, has been in touch with the committee all summer, creating a new curriculum for his class and deciding upon ways to bring plasma science into his classroom. The after-school

effort will pull in the HAZMAT team from the Milwaukee Fire Department, which will discuss how plasmas are used for detection in that line of work.

Local teachers will have their first chance to experience APS-DPP education when they arrive at the Hilton Milwaukee City Center Hotel for Science Teachers Day on Tuesday, October 24. They will spend the morning learning about the fundamentals of fusion energy and plasma science. For the remainder of the day they will attend workshops about content of their choosing, focusing on such subjects as the nature of matter, the electromagnetic spectrum, Newton's Laws and how to bring hands-on plasma activities into the classroom.

Teachers attending past events have praised the workshops and the collegial environment. A lunch with scientists and other teachers, sponsored by APS-DPP, is a highlight, providing a kind of networking rarely available to them.

The Plasma Sciences Expo, at the Wisconsin Center, will be open for school groups on October 26 and 27 from 8:00 a.m. to 2:30 p.m., and for the general public on October 26 from 6:00 to 8:00 p.m. APS-DPP members are welcome to stop in and check out the Expo at any time it is open.



The Expo features hands-on experiments from national and international institutions, as well as local education and industrial venues. Local exhibitors joining this year include Carthage College Society of Physics Students, Marquette University, Madison West Rocket Club, University of Iowa and University of Wisconsin-Milwaukee Astronomy Club. The University of Wisconsin Wonder of Physics booth, a popular anchor of the Expo for many years, will have a strong presence.

Arturo Dominguez wants APS-DPP members to know that the committee is always looking for new people to help maintain these important educational programs. Members can participate in planning, creating new workshops or manning an exhibit at the Expo. They are also looking for financial support. For the first time, a donation box for DPP education activities will be available at registration. There are many ways to support the program.

The Education Committee invites all to visit the Expo to experience why one teacher described it simply as: "Awesome event."

Interested in the APS-DPP outreach efforts? Find out more. Please contact Arturo Dominguez at arturod@pppl.gov.

Milwaukee's Essential Eats

Sanford

1547 N. Jackson St.
(414)276-9608, sanfordrestaurant.com

With a chef's tasting menu of upscale "New American" fare, Sanford has been called the best restaurant in Milwaukee. New owners have breathed new life and award-winning food into this old standby. The menu changes seasonally, or you can spring for the tasting menu and put all your trust in the chef!

Blue's Egg

317 N. 76th St.
(414) 299-3180, bluesegg.com

Enjoy carry out coffee and pastries at this breakfast and lunch only spot, or wait for a table and dine on customer favorites like the crispy pulled ham-stuffed hash browns and Bloody Marys.

Solly's Grille

4629 N. Port Washington Rd.
(414) 332-8808, sollysgrille.com

Serving their signature butter burger (yes, you read that right-butter burger) since 1936, Solly's is a historic diner with plenty of flavor. The friendly restaurant is family run and listed as one of the top 15 places to eat in Milwaukee.

Ardent

1751 N. Farwell Ave.
(414) 897-7022, ardentmke.com

If you're looking for something more on the hip, upscale dining scene, visit Ardent for some fascinating molecular-gastronomy. In a delightfully bizarre flip, head over after 11:30 p.m. on Saturday nights when it changes into Red Light Ramen, serving homemade ramen, PBR and booze slushies.

Leon's Frozen Custard

3131 S. 27th St.
(414) 383-1784, leonsfrozencustard.us

This family-run, cash-only diner is rumored to be the inspiration for Arnold's Drive-In on "Happy Days". The frozen custard is so good, the place stays open year-round so locals can get their fix. The menu features shakes, malts, sundaes and cones as well as some hot sandwiches to go.

Five O'Clock Steakhouse

32416 W. State St.
(414) 342-3553, fiveoclocksteakhouse.com

Self-described as "rich in tradition and free of trends," the menu at this classic steakhouse boasts old school meat and potatoes on a grand scale. For quintessential Wisconsin fare, this supper-club steakhouse should be first on your list!

Fun Milwaukee Fact

Actor Gene Wilder was born Jerome Silberman in Milwaukee in 1933.

HEDSA Annual General Meeting

**Wednesday, October 25
12:30 p.m. - 2:00 p.m.**

Wisconsin Center, 203C

HEDSA will hold its Town Hall meeting in Milwaukee. The purpose of this meeting is to announce the new steering committee members and HEDSA leadership. A report will be given regarding 2017 HEDSA activities. Program managers from Federal Funding Agencies such as OFES, NNSA, AFOSR and NSF will provide updates on the state of sponsored research in HED plasmas, and to engage the community in an open dialogue. Current members of HEDSA and all graduate students are strongly encouraged to attend. To join HEDSA, please visit HEDSA.org..

Division of Plasma Physics (DPP) Business Meeting

**Wednesday, October 25
5:15 p.m. - 6:15 p.m.**

Wisconsin Center, 203C

The business meeting of the Division of Plasma Physics will include reports of actions undertaken by DPP on issues important to our membership. New items of business will be considered in the following order: (1) Written motions, together with any supporting arguments, received by the Secretary-Treasurer, Hui Chen, at the DPP Registration Desk, Wisconsin Center, before noon on Monday, October 23, or which were emailed to Dr. Chen (chen33@llnl.gov) by noon on Friday, October 20, 2017. Copies of such material will be displayed on a bulletin board near the DPP registration area to give members reasonable notice in case they wish to participate in the discussion and vote on such motions. (2) Written motions submitted to the Secretary-Treasurer prior to the start of the business meeting. (3) Other new business not included in (1) or (2).

Fun Milwaukee Fact

Christopher Latham Sholes invented the first typewriter in Milwaukee in 1867.

DPP Banquet

Wednesday, October 25

Reception: Hilton Crystal Ballroom Foyer, 6:30 p.m.

Dinner: Crystal Ballroom, 7:30 p.m.

The official banquet of the DPP will be held on Wednesday evening. A cash-bar reception preceding the evening banquet at 6:30 p.m. will be held in the Hilton Crystal Ballroom Foyer. A subsidized banquet ticket can be purchased for \$50 at the registration desk up to 5:00 p.m. on Tuesday, October 24. Tickets will be sold on a space-available basis and are non-refundable. Tickets must be presented for admission at the door to the banquet hall. Tickets will not be sold at the door. The banquet program will include presentation of the James Clerk Maxwell Prize, the John Dawson Award for Excellence in Plasma Physics Research, the Thomas H. Stix Award for Outstanding Early Career Contributions to Plasma Physics Research, the Marshall N. Rosenbluth Outstanding Doctoral Thesis Award in Plasma Physics, the Katherine E. Weimer Award for Women in Plasma Science and recognition of newly elected APS Fellows.

The Milwaukee String Quartet will entertain banquet attendees.

Milwaukee String Quartet



The Milwaukee String Quartet is comprised of four professional musicians dedicated to providing the very best in music for every occasion.

The members have been or are currently performers in various orchestras and chamber groups in the Greater Milwaukee area, including the Milwaukee Symphony, Festival City Symphony, Kenosha Symphony, Wisconsin Philharmonic and many others. The quartet has been performing together in the area for more than 20 years.

Over the years of playing numerous events, the string quartet has established

a repertoire of pieces suitable for any occasion. Many of these pieces come from the classical genre, but also versions of popular hits.

The Milwaukee String Quartet is not a contracting agency: the four members are the people who will play for the banquet. The group prefers to play as a quartet, which provides the richest sound for any special event.

Fun Milwaukee Fact

Milwaukee is located on Lake Michigan, the second largest of the five Great Lakes with 22,300 square miles of fresh water.

Review, Tutorial and Invited Speaker Poster Sessions

Wisconsin Center, Exhibit Hall D

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 Exhibit Hall D. 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, October 27.

Plasma Science Christian Fellowship

Wednesday, October 25

6:45 a.m. - 7:45 a.m.

Wisconsin Center, 202AB

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 faith connects to the workplace experience and life as scientists. Please join us for an hour on Wednesday morning before the opening session review talk. Bring your coffee and join us. Contact Darren Craig (darren.craig@wheaton.edu) if you have questions or need additional information. We hope to see you there!

Fun Milwaukee Fact

The first Harley-Davidson motorcycle was built in the city in 1903.

One Modeling Framework for Integrated Tasks (OMFIT)

Thursday, October 26
12:30 p.m. - 2:00 p.m.

Wisconsin Center, 203C

OMFIT (One Modeling Framework for Integrated Tasks) is an integrated modeling and experimental analysis software framework. Users and developers of OMFIT currently reside in many parts of the world. The OMFIT User Group Meeting at APS DPP will provide an opportunity to meet face to face with other users and developers. During the meeting, the current status of OMFIT will be gauged through soliciting feedback, and future plans will be discussed. Future users of OMFIT or other interested persons are also welcome. www.gafusion.github.io/OMFIT-source/

Town Meeting on ITER Status and Plans

Thursday, October 26
7:30 p.m. - 9:00 p.m.

Winconsin Center, 102ABC

Speaker: Dr. Bernard Bigot, ITER Organization Director-General



The US Burning Plasma Organization is pleased to welcome Dr. Bernard Bigot, who will give an update on progress in the ITER Project. Dr. Bigot took over as Director General of the ITER Organization in early

2015 following a distinguished career that included serving as Chairman and CEO of the French Alternative Energies and Atomic Energy Commission and as High Commissioner for ITER in France. During his tenure at ITER, the project has moved into high gear, with rapid progress evident on the construction site and preparation of a staged schedule and a research plan leading from where we are today through all the way to full DT operation.

ITER (the Latin word for "the way") is a large-scale scientific experiment intended to prove the viability of fusion as an energy source. ITER is currently under construction in the south of France. In an

unprecedented international effort, seven partners—China, the European Union, India, Japan, Korea, Russia and the United States—have pooled their financial and scientific resources to build the biggest fusion reactor in history. ITER will not produce electricity, but it will resolve critical scientific and technical issues in order to take fusion to the point where industrial applications can be designed. By producing 500 MW of power from an input of 50 MW—a "gain factor" of 10—ITER will open the way to the next step: a demonstration fusion power plant.

Beginning PlasmaPy: An open source Python package for plasma physics

In recent years, scientists in numerous disciplines have collaboratively developed open-source packages such as Astropy and SunPy that are transforming the way scientific research is done in their respective fields. We have recently begun open development of PlasmaPy: a package with the ambitious goal of becoming a similar, fully open-source community-driven Python ecosystem for plasma physics that uses modern best practices for scientific computing (<http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1001745>).

If you would like to participate in this project in its early stages and help guide its development, feel free to contact Nick Murphy (namurphy@cfa.harvard.edu) with any questions or ideas.

2017 DPP Election Results

Vice-Chair:

Ellen Zweibel,
University Wisconsin-Madison

Executive Committee Members:

Boris Breizman,
University of Texas

Richard Buttery,
General Atomics

Tammy Ma,
Lawrence Livermore National Laboratory

Fun Milwaukee Fact

German Fest serves 20,000 bratwursts and 15,000 pieces of strudel to hungry Milwaukeeans each summer.

Things to Do in Milwaukee!

FANTASTIC: Four Contemporary Illustration Artists

October 20 - December 2, 2017
Milwaukee Institute of Art & Design,
273 E. Erie St.

This event is FREE

FANTASTIC is an exhibition of four of the United States' finest contemporary illustration artists: Henrik Drescher, Frances Jetter, Katherine Streeter and Carl Dunn. This exhibition will present recent drawings, paintings, collages and books by these four artists. FANTASTIC reveals their art well beyond the purview of the newspapers and magazines, informed by a personal vision of the world and a fearless commitment to the unbridled expression of that vision through their art. Milwaukee Institute of Art & Design's Frederick Layton Gallery. Please note that gallery hours are Monday-Saturday, 10 a.m. - 5 p.m.

Gothic Milwaukee Historic Haunted Walking Tour

Tuesday, October 24th -
Saturday, October 28th
Cathedral Square Park,
825 N. Jefferson St.

Tickets are \$15 per walker

Join us for a glimpse of Milwaukee's past lead by your own costumed tour guide for this historical tour of downtown Milwaukee. Discover the dark secrets and eerie sightings lurking in the shadows of the city. The outdoor tour runs rain or shine and is approx 90 minutes. Reservations are recommended. More information at www.gothicmilwaukee.com.

2CELLOS

Thursday, October 26th
BMO Harris Bradley Center,
1001 North Fourth Street
This event is FREE

Young Croatian cellists Luka Sulic and Stjepan Hauser, together known as 2CELLOS, have achieved international success by taking the cello to a new level with their incredible talent and undeniable passion. Their playing style has broken down the boundaries between different genres of music, from classical and film music to pop and rock. 2CELLOS have no limits when it comes to performing live and are equally as impressive when playing Bach and Vivaldi as they are when rocking out to AC/DC and Iron Maiden.

San Remy Galley :: Fall Colors

Friday, October 27th
San Remy Gallery,
207 Buffalo St., suite 16

This event is FREE

San Remy Gallery proudly represents an eclectic mix of original art, both contemporary and traditional, from some of the most talented artists in the Greater Milwaukee area; showcases unique hand-crafted artisan pieces that includes paintings, sculpture, furniture, wearable fiber art, jewelry, mixed media and much more! Located in the lower level of the Marshall building in the Third Ward. For more information contact sanremygallery@gmail.com or (414) 519-7369.

Code of Conduct for APS Meetings

It is the policy of the American Physical Society (APS) that all participants, including attendees, vendors, APS staff, volunteers and all other stakeholders at APS meetings will conduct themselves in a professional manner that is welcoming to all participants and free from any form of discrimination, harassment or retaliation. Participants will treat each other with respect and consideration to create a collegial, inclusive and professional environment at APS Meetings. Creating a supportive environment to enable scientific discourse at APS meetings is the responsibility of all participants.

Participants will avoid any inappropriate actions or statements based on individual characteristics such as age, race, ethnicity, sexual orientation, gender identity, gender expression, marital status, nationality, political affiliation, ability status, educational background or any other characteristic protected by law. Disruptive or harassing behavior of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behavior and language, unwelcome jokes or comments, unwanted touching or attention, offensive images, photography without permission and stalking.

Violations of this code of conduct policy should be reported to meeting organizers, APS staff, or the APS Director of Meetings. Sanctions may range from verbal warning, to ejection from the meeting without refund, to notifying appropriate authorities. Retaliation for complaints of inappropriate conduct will not be tolerated. If a participant observes inappropriate comments or actions and personal intervention seems appropriate and safe, they should be considerate of all parties before intervening.

Call for Nominations for 2018 Prize and Awards

Deadline: Monday, April 2, 2018

A prize or an award presented by APS DPP is one of the highest honors a physicist can receive. Membership in APS or DPP is not required for nomination or selection for a prize or an award unless specified in the criteria of a particular prize/award. The nominator does have to be an APS member.

DPP annually solicits nominations for one prize and three awards. The deadline for receipt of all nominations is Monday, April 2, 2018. Please take time to nominate exceptional DPP colleagues in 2018.

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

Go to <http://www.aps.org/programs/honors/nomination.cfm> for additional Nomination Guidelines.

The nomination package must be submitted by Monday, April 2, 2018. Acknowledgement of receipt can be requested. The DPP dissertation award has other requirements in addition to those listed on the APS Nomination Guidelines website, so check for descriptions of the awards to which you are making a nomination.

James Clerk Maxwell Prize for Plasma Physics

Stewart Prager, Chair
Princeton University
sprager@pppl.gov

John Dawson Award for Excellence in Plasma Physics Research

Walter Gekelman, Chair
University of California, Los Angeles
gekelman@physics.ucla.edu

Marshall N. Rosenbluth Outstanding Doctoral Thesis Award in Plasma Physics

Hye-Sook Park, Chair
Lawrence Livermore National Laboratory
park1@llnl.gov

Thomas H. Stix Award for Outstanding Early Career Contribution to Plasma Physics Research

Cameron Geddes, Chair
Lawrence Berkeley National Laboratory
crggeddes@lbl.gov

Landau-Spitzer Award

David Meyerhofer, Chair
Los Alamos National Laboratory
dmey@lanl.gov

Note: The deadline for this award is Thursday, March 8, 2018. Based on the award regulations, it will be given to an early career researcher in 2018. If it is awarded to a team, not all members need to be early career researchers.

American Science and Surplus

6901 W. Oklahoma Ave.
(414) 541-7777,
www.sciplus.com

In the words of the owner, "Our items are great gifts, inexpensive supplies, and an endless reason for a giggle or a 'Gee whiz!' We take pride in our product selection and try to be scrupulously honest in presenting our knowledge of what we have."

Milwaukee Art Museum

700 N. Art Museum Dr.
(414) 224-3200,
www.mam.org

If the magnificent structure wasn't compelling enough, the collection at the MAM is everything you want out of a small museum - comprehensive but precise with famous work alongside new pieces by great contemporary artists.

The American Geographical Society Library

2311 E. Hartford Ave.
(414) 229-6282, www.uwm.edu

Within the campus of the University of Wisconsin-Milwaukee is a geographer's treasure trove: more than a million artifacts from the American Geographical Society and one of the most incredible collections of maps, atlases and globes to be found anywhere in America. Highlights of the collection include a map from 1452 and a 700-pound globe.

Evaluation Form for 2017 APS DPP Annual Meeting

Please give us your candid opinion of the 2017 DPP annual meeting. Base your evaluation on a comparison to previous APS DPP and non-APS scientific meetings. You may use a separate page for additional comments, or email your comments.

APS member Non-member Did you attend last year in San Jose? Yes No
Workplace: university gov't. lab industry self-employed student retired
Plasma physics subfield: State (or country) of residence: _____

Check all 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 your research? Did you co-author research presented by others?

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

Scientific content and organization

<input type="radio"/> range of topics	5	4	3	2	1
<input type="radio"/> review talks	5	4	3	2	1
<input type="radio"/> invited sessions	5	4	3	2	1
<input type="radio"/> tutorial sessions	5	4	3	2	1
<input type="radio"/> poster sessions	5	4	3	2	1
<input type="radio"/> mini-conferences	5	4	3	2	1
<input type="radio"/> scheduling (overlap)	5	4	3	2	1
<input type="radio"/> pocket Epitome	5	4	3	2	1
<input type="radio"/> mobile app	5	4	3	2	1
<input type="radio"/> chronicle content	5	4	3	2	1
<input type="radio"/> meeting announcements	5	4	3	2	1

Meeting logistics

<input type="radio"/> location (city/state)	5	4	3	2	1
<input type="radio"/> length of meeting	5	4	3	2	1
<input type="radio"/> meeting rooms layout	5	4	3	2	1
<input type="radio"/> abstract submission process	5	4	3	2	1
<input type="radio"/> registration services	5	4	3	2	1
<input type="radio"/> AV equipment	5	4	3	2	1
<input type="radio"/> speaker ready room	5	4	3	2	1

Events / Amenities

<input type="radio"/> education/outreach program	5	4	3	2	1
<input type="radio"/> job fair	5	4	3	2	1
<input type="radio"/> résumé help desk	5	4	3	2	1
<input type="radio"/> exhibitors	5	4	3	2	1
<input type="radio"/> wireless service	5	4	3	2	1
<input type="radio"/> special events	5	4	3	2	1
<input type="radio"/> banquet/reception	5	4	3	2	1
<input type="radio"/> beverage breaks	5	4	3	2	1
<input type="radio"/> peer interaction	5	4	3	2	1
<input type="radio"/> hotel accommodations	5	4	3	2	1
<input type="radio"/> hotel location	5	4	3	2	1

Notes/Doodles

Designed by:

