

IPAC'18 Louis Costrell Awards Session



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Introduction

Student poster awards

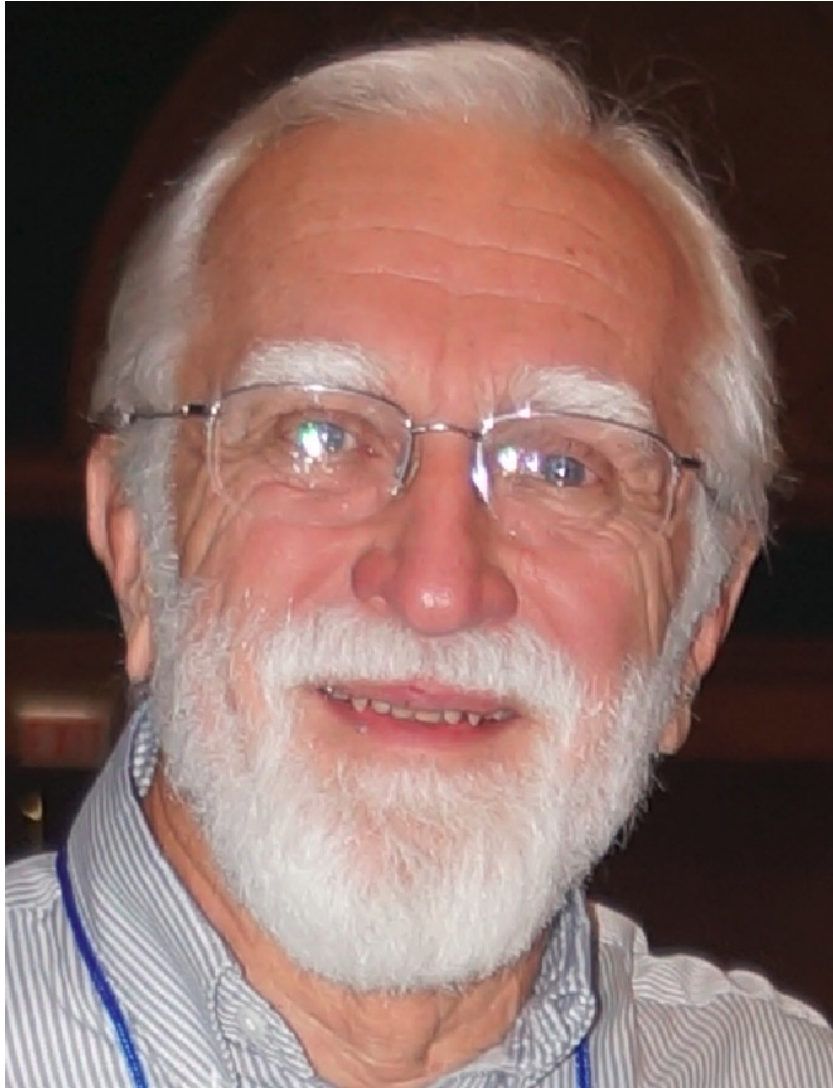
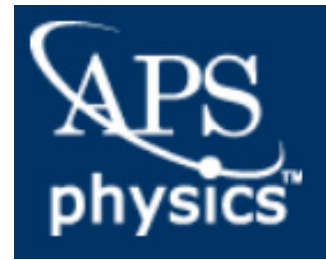
Community service announcements

IEEE PAST awards and talks

APS DPB Fellows

APS DPB prizes and talks

Stan Schriber (LANL & MSU)



Executive Committee of the APS Division of Physics of Beams expresses sincere gratitude to Prof. Stan Schriber of LANL (ret.) for his outstanding service to the Society and to the entire field of accelerators and beams as the DPB Secretary/Treasurer from April 2008 to December 2017.

Thank you, Stan!

Thanks to Prof. Bill Barletta for leadership of US Particle Accelerator School (USPAS) for 12 years



Prof. William Barletta
USPAS Director
2006 - 2017

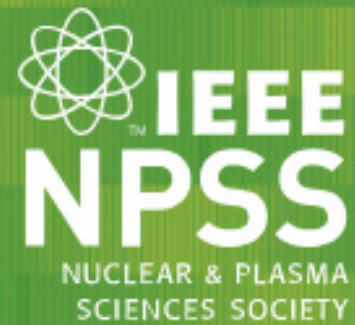
- Guided USPAS as a premier educational asset serving Accelerator Science and Technology
- USPAS initiating **Bill Barletta Scholarship**
 - Competitive award for top student performance in summer session of *Fundamentals of Accelerators*
 - Receives free registration + housing to future USPAS session



U.S. DEPARTMENT OF
ENERGY

Office of
Science

IEEE Particle Accelerator, Science, and Technology (PAST) Awards

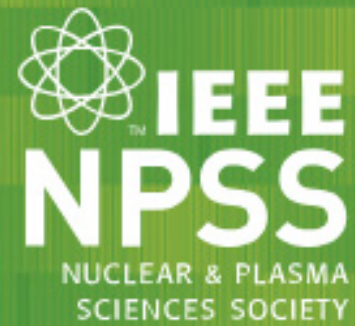


IEEE-NPSS PAST

The Particle Accelerator Science and Technology (PAST) committee is one of the technical committees of the IEEE Nuclear and Plasma Sciences Society, dealing with the science and engineering of particle accelerators.

IEEE-NPSS PAST supports three awards that are made at NA-PAC and IPAC when held in the Americas.

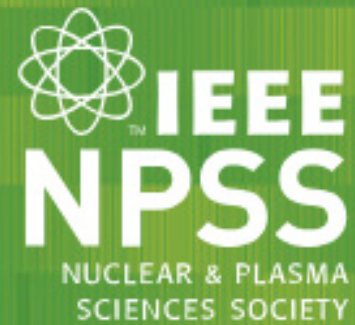
IEEE Particle Accelerator, Science, and Technology (PAST) Awards



PAST Award:

The IEEE Nuclear and Plasma Sciences Society awards the Particle Accelerator Science and Technology Award to individuals who have made outstanding contributions to the development of particle accelerator science and technology. Two awards are made at NA-PAC and IPAC when held in the Americas. At least one award will be given to an individual early in his/her career.

IEEE Particle Accelerator, Science, and Technology (PAST) Awards



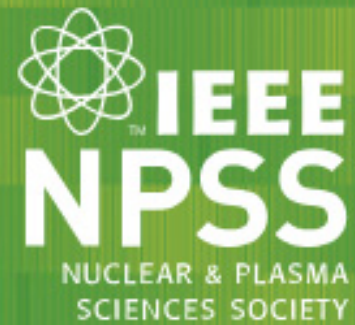
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**Dr. Herman Grunder, Founding Director, Jefferson Lab;
Director Emeritus, Argonne National Laboratory**

For far reaching contributions to accelerator science and technology.

IEEE Particle Accelerator, Science, and Technology (PAST) Awards



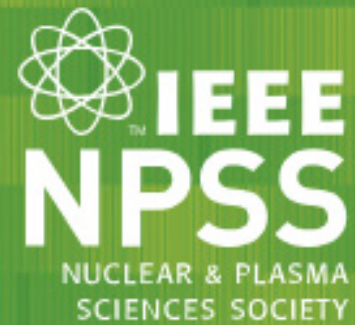
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Dr. Sandra Biedron, University of New Mexico

For broad impact in accelerator science and technology.

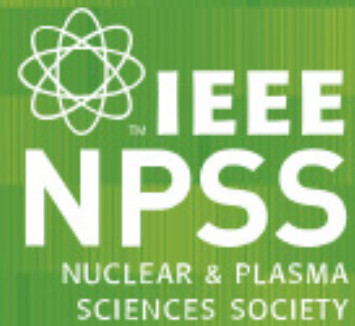
IEEE Particle Accelerator, Science, and Technology (PAST) Awards



PAST Doctoral Student Award:

To recognize significant and innovative technical contributions to the field of particle accelerator science and technology as demonstrated in a student's doctoral thesis.

IEEE Particle Accelerator, Science, and Technology (PAST) Awards



PAST Doctoral Student Award:

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Martina Martinello, Fermilab National Accelerator Laboratory

For contributions to physical understanding of limiting factors in SRF cavities.

American Physical Society (APS) Division of Physics of Beams (DPB)



Division of Physics of Beams

The Division was established in 1985. The objective of the Division of Physics of Beams is the advancement and diffusion of knowledge regarding the nature and behavior of beams and the instruments for their production and use. It provides to its members, and to all members of the American Physical Society, an opportunity for coordination and a forum for discussion and communication. In addition, the Division of Physics of Beams:

- Promotes research and development in the science of beams;
- Promotes applications of the science of beams (the use of beams themselves in the study of the properties of nuclei, condensed matter, etc. is not the principal interest of the Division);
- Encourages scholarly publication;
- Promotes education in beam science and technology;
- Enhances the professional standing of its members; and
- Endorses the [APS Policy on Equal Professional Opportunity](#).

APS Fellowship



- Any APS member in good standing is eligible for nomination and election to Fellowship.
- The criterion for election is exceptional contributions to the physics enterprise; e.g., 1) outstanding physics research, 2) important applications of physics, 3) leadership in or service to physics, or 4) significant contributions to physics education.
- Fellowship is a distinct honor signifying recognition by one's professional peers. Each nomination is evaluated by the Fellowship committee of the appropriate APS division, topical group or forum, or by the APS General Fellowship committee.
- The membership of APS is diverse and global, and the Fellows of the APS should reflect that diversity.

APS DPB Fellows (2016)



Galambos, John, Oak Ridge National Laboratory

Citation: For outstanding leadership and vision in the design, commissioning, and effective operation of high power hadron accelerators.

Hutton, Andrew, Jefferson Lab

Citation: For extensive technical contributions to accelerators world-wide as designer and adviser; for leading the commissioning and operation of world's first large scale superconducting radio frequency accelerator at Jefferson Lab; and for fostering graduate education in accelerator science and technology.

Minty, Michiko G., Brookhaven National Laboratory

Citation: For achievements in beam instrumentation and operations leading to greatly enhanced performance of the Relativistic Heavy Ion Collider.

Musumeci, Pietro, University of California, Los Angeles

Citation: For pioneering work in the physics of high brightness beams, including ultrafast relativistic electron diffraction, and high gradient inverse free electron laser acceleration.

Smirnova-Simakov, Evgenya, Los Alamos National Laboratory

Citation: For the development of photonic-band gap accelerating structures.

Steier, Christoph, Lawrence Berkeley National Laboratory

Citation: For seminal contributions to the understanding, development, and operation of storage ring based synchrotron light sources, including effects of intrabeam scattering, lattice optimization, undulator compensation, and brightness improvements.

APS DPB Fellows (2017)



Aleksandrov, Alexander V, Oak Ridge National Laboratory

Citation: For extraordinary technical contributions leading to advancements in the understanding and operation of high power hadron beams, and for world-wide leadership in the field of beam instrumentation.

Burov, Alexey, Fermilab

Citation: For contributions to the accelerator physics theory, including the theoretical foundations of the Tevatron Run II accelerator performance; for the development of the theory of instabilities for space charge dominated bunched beams; and for the development of analytical tools predicting instability thresholds.

Hoffstaetter, Georg Heinz, Cornell University

Citation: For pioneering contributions to the development of the science and technology of energy recovery linacs.

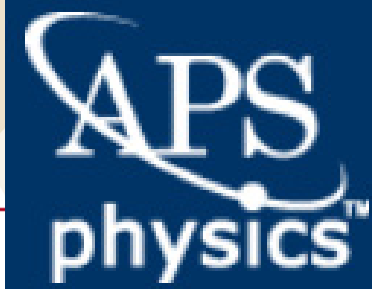
Lewellen, John W, Los Alamos National Laboratory

Citation: For leadership and contributions to the development of practical, high-power superconducting RF photocathode guns, including the development of novel RF cavity designs.

Pilat, Fulvia, Oak Ridge National Laboratory

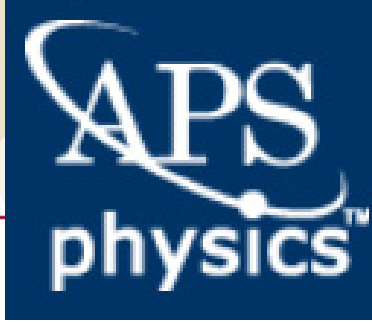
Citation: For scientific leadership in the JLEIC effort at Jefferson Laboratory, contributions to the successful commissioning of CEBAF accelerator's 12 GeV upgrade, and to the development and operations of Brookhaven National Laboratory's Relativistic Heavy Ion Collider.

APS DPB Outstanding Doctoral Thesis Research in Beam Physics Award



This award recognizes doctoral thesis research of outstanding quality and achievement in beam physics and engineering. The annual award consists of \$2,500 for the recipient, a certificate, and a travel reimbursement up to \$500.

APS DPB Outstanding Doctoral Thesis Research in Beam Physics Award 2017

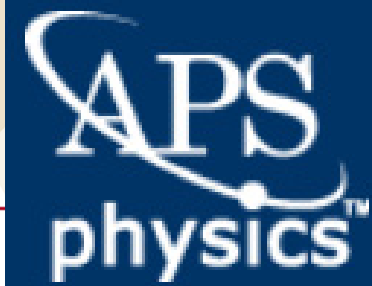


This award recognizes doctoral thesis research of outstanding quality and achievement in beam physics and engineering. The annual award consists of \$2,500 for the recipient, a certificate, and a travel reimbursement up to \$500.

Spencer J. Gessner (CERN)

"In recognition of an original theoretical treatment and an experimental demonstration of accelerating positrons in a hollow channel plasma wakefield accelerator."

APS DPB Outstanding Doctoral Thesis Research in Beam Physics Award 2018



This award recognizes doctoral thesis research of outstanding quality and achievement in beam physics and engineering. The annual award consists of \$2,500 for the recipient, a certificate, and a travel reimbursement up to \$500.

Sergey Antipov (CERN)

"for experimental studies and analysis of the electron cloud build-up and corresponding instability in accelerators with combined function magnets and for the development of an effective mitigation technique applied in the Fermilab's Recycler ring"

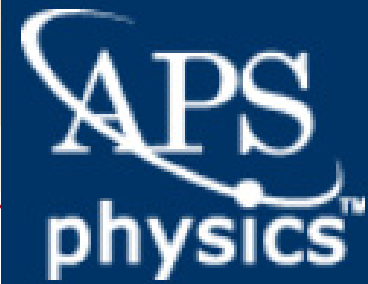
APS DPB Robert R. Wilson Prize



Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators

To recognize and encourage outstanding achievement in the physics of particle accelerators. The prize consists of \$7,500, an allowance for travel to the meeting at which the prize is awarded and a certificate citing the contributions made by the recipient. It is presented annually.

APS DPB Robert R. Wilson Prize 2017



Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators

To recognize and encourage outstanding achievement in the physics of particle accelerators.

James Bjorken (SLAC)

Sekazi Mtingwa (MIT)

Anton Piwinski (DESY)

"For the detailed, theoretical description of intrabeam scattering, which has empowered major discoveries in a broad range of disciplines by a wide variety of accelerators, including hadron colliders, damping rings/linear colliders, and low emittance synchrotron light sources."

Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators

To recognize and encourage outstanding achievement in the physics of particle accelerators.

Alexander Wu Chao (SLAC)

"for insightful, fundamental and broad-ranging contributions to accelerator physics, including polarization, beam-beam effects, nonlinear dynamics, and collective instabilities, for tireless community leadership and for inspiring and educating generations of accelerator physicists."