

DPB May 1997 Newsletter

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Questions? Comments? Contact the Secretary-Treasurer:

Mel Month

USPAS, MS 125, Fermilab, P.O. Box 500

Batavia, IL 60510

Phone: 630-840-3896/fax 630-840-8500

Email: USPAS@FNAL.GOV

DPB Homepage on the World Wide Web

Visit our homepage on the WWW, <http://www.aps.org/units/dpb/> and see information and deadlines for prizes and awards, fellowships, meetings and much more. For all other APS information, including membership and meeting forms, go to the APS homepage at: <http://www.aps.org>.

Election Results for the 1997 DPB Executive Committee

The election for the 1997 Division of Physics of Beams (DPB) Executive Committee has been completed. There were a total of 536 votes cast corresponding to 41% of the membership (1323 on November 1, 1996).

The winners are: John Peoples for Vice-Chair; and Swapan Chattopadhyay and Alex J. Dragt for Members-at-Large (3 years). The membership of the 1997 DPB Executive Committee will therefore be:

Chair	Martin P. Reiser	(4/98) Chair-
Elect	William B. Herrmannsfeldt	(4/98) Vice-Chair
John Peoples		(4/98) Divisional Councilor Hermann
Grunder	(12/97) Secretary-Treasurer	Melvin Month
(4/98)	Nanette Phinney	(5/99)

Each term of office, except for the office of Divisional Councilor, begins in May 1997 on the last day of the Division's Regular Meeting and ends in April/May of the year indicated on the last day of the Division's Regular Meeting. The Chair-Elect will become Chair and the Vice-Chair will become Chair-Elect in the following year.

Membership

1997 DPB Committees and DPB-Related Committees

Executive Committee (5/97 - 5/98) (see "Election Results" section)

Nominating Committee (5/97 - 5/98): Herrmannsfeldt (chair), Alonso (Bylaws rep), Ben-Zvi, Chattopadhyay (APS rep), Grunder, Hamm, G. Jackson, Katsouleas, Month, O'Shea, Peoples, Rice

Fellowship Committee (5/97 - 5/98): Peoples (chair), Chao, Craddock, Galayda, Holmes, Joshi, Sheffield

Publications Committee (5/97 - 5/98): Simpson (chair), Chen (v-chair), Bisognano (PRE Board of Ed), Rosenzweig (PRE Board of Ed), Siemann (PRL Div. Asst. Ed), Wurtele

Education Committee (5/97 - 5/98): G. Jackson (chair), Berz, Minty, O'Shea, Rosenzweig, Whittum

Bylaws Committee (5/97 - 5/98): Alonso (chair), Herrmannsfeldt, Month, Reiser

Wilson Prize Committee (5/97 - 5/98, for 1998 Prize): Pellegrini (chair), Grunder (v-chair), Ben-Zvi, H. Edwards, Hofmann

Doctoral Research Award Committee (5/97 - 5/98, for 1998 Award): Chao (chair), Siemann (v-chair), Dragt, Katsouleas, C.M. Tang

Program Committee (for 1998 DPB Annual Meeting): Herrmannsfeldt (chair), Peoples (v-chair), approximately 25 members to be selected

PAC97 Organizing Committee (12/95 - 6/97): Craddock (chair), Allen, Barletta, Bisognano, Cho, Costrell, Dawson, Finley, Friesel, Hartill, Kimura, Krinsky, Leemann, Olivier, Reiser, Ripin, Roberson, Schriber, Siemann, Sutter, Weng, Westenskow, York

PAC97 Program Committee (12/95 - 6/97): Reiser (chair), plus approximately 65 members divided into 16 technical subcommittees

Prize Winners in Beam Physics and Accelerator Technology Announced

1997 APS Robert R. Wilson Prize to Recognize and Encourage Outstanding Achievement in the Physics of Particle Accelerators

A prize of the American Physical Society sponsored by the APS Division of Physics of Beams, the APS Division of Particles and Fields and the Friends of R.R. Wilson. *Andrew Sessler*, "for a broad range of theoretical and conceptual advances in particle beam dynamics, leading to important accelerator performance improvements; for contributions in the areas of synchrotron rings, including negative mass instability and resistive wall instability, and free electron lasers; for the two-beam accelerator concept; for helping shape the very language of beam physics; and for inspiring and guiding several generations of accelerator scientists and serving as a statesman of science"
Prize Committee Chair: Christoph Leemann

1997 APS Award for Outstanding Doctoral Thesis Research in Beam Physics

An award of the American Physical Society sponsored by the Division of Beam Physics and Universities Research Association (URA). *Linda Spentzouris*, "for her pioneering measurements of nonlinear coherent phenomena in high-energy hadron beams, building upon the rich theoretical development in plasma physics over the last several decades. Her findings include the identification of three-wave interactions in beams, and a related phenomenon, echoes, which provides a means to detect extremely weak

diffusive processes at work in the beam. Her work serves as a starting point for the understanding of saturation and turbulent states in high-energy synchrotrons."

Award Committee Co-Chairs: Thomas Marshall and John Nation

Thesis Advisor: Patrick Colestock

1997 IEEE PAC Technology Award

An Award of the Particle Accelerator Conference given on behalf of the Nuclear and Plasma Sciences Society of the IEEE and sponsored by the NPSS.

Ka-Ngo Leung, "for his many ion source technology contributions benefiting synchrotrons, fusion devices, and systems for ion implantation, proton therapy, and ion beam lithography."

David F. Sutter, "for forming and managing a highly effective federal R&D program for the advancement of particle accelerator technologies."

Award Committee Chair: Christoph Leemann

1997 U.S. Particle Accelerator School Prize for Achievement in Accelerator Physics and Technology.

A prize of the Board of Governors of the USPAS sponsored by URA, SURA, Varian-Vacuum Products, Westinghouse Electric Corporation and John Wiley and Sons, publishers.

Daniel Boussard, "for original contributions to the fields of RF, longitudinal beam dynamics, and feedback, and for the realization of superconducting acceleration systems."

Chandrashekar Joshi, "for pioneering experiments on high gradient, laser-driven, plasma beat-wave acceleration."

Prize Committee Chair: Robert H. Siemann

The 1997 prizes and awards for achievement in Beam Physics and Accelerator Technology will be presented at an awards ceremony during the 1997 IEEE/APS Particle Accelerator Conference at the banquet to be held Wednesday, May 14, 1997.

Eight DPB Members Promoted to APS Fellows

The APS Council at its November 1996 meeting has elected to fellowship the following members recommended by the DPB:

Roger Odell Bangerter, "for fundamental contributions to all aspects of heavy-ion-driven inertial confinement fusion and leadership of the U.S. effort to develop its potential as an energy source."

George James Caporaso, "for original contributions to the design and analysis of high-current electron accelerators, especially for instability studies which have greatly extended the utility of induction linacs."

Max Cornacchia, "for broad contributions to the development of several accelerators, particularly in the design and development of synchrotron light sources from the first generation through current studies on concepts for future sources."

John Nicolas Galayda, "for his key role in the design, construction, and commissioning of the National Synchrotron Light Source and the Advanced Photon Source."

John Irwin, "for significant contributions to the research, development and application of modern techniques of nonlinear dynamics to accelerator systems, in particular to electron-positron colliding beam devices."

Thomas Christos Katsouleas, "for original contributions to advanced particle acceleration concepts including the invention of the Surfatron accelerator, and his detailed studies of beam loading and emittance growth in plasma accelerators."

Thomas Roser, "for contributions to the accelerator physics of polarized proton beams, in particular the successful demonstration of the principle of the Partial Siberian Snake."

In addition, *Jay Marx* has also been elected to be an APS fellow "for his leadership of the successful construction of the Advanced Light Source (ALS), the first of the third generation synchrotron light sources in the U.S."

PAC97: 1997 Particle Accelerator Conference

The 1997 Particle Accelerator Conference - the 17th in this series - is being organized by TRIUMF and held May 12-16, 1997 at the Hotel Vancouver, in downtown Vancouver, B.C. The conference covers new developments in all aspects of the science, technology, and use of accelerators. It also provides a channel of communication for accelerator scientists and engineers and persons concerned with the applications of accelerators. The program, as usual, includes invited talks and both oral and poster contributed papers.

The PAC is a representation of a rich field forever changing and growing. Combining engineering and physics in ingenious ways, the field fosters the emergence of new methods and new technologies so as to satisfy and stimulate the forward march of frontier science, medicine, industry and defense. Detailed information on PAC97 is available on the web at <http://www.triumf.ca/pac97.html>.

The Organizing Committee is being chaired by M.K. Craddock (UBC and TRIUMF: phone 604-222-7341, fax 604-222-7309, e-mail CRADDOCK@TRIUMF.CA) and the Program Committee by M. Reiser (U. Maryland: phone 301-405-4960, fax 301-314-9437, e-mail MREISER@GLUE.UMD.EDU). General inquiries should be directed to the

Conference Coordinator, Elly Driessen (phone 604-222-7352, fax 604-222-1074, e-mail PAC97@TRIUMF.CA). If you wish to be added to the conference mailing list, contact Lorraine Stanford (LANL phone 505-667-5634, fax 505-665-8604, e-mail STANFORD_L@LANL.GOV).

The conference is jointly sponsored by the Institute of Electrical and Electronics Engineers (IEEE) through its Nuclear and Plasma Sciences Society (NPSS), and by the American Physical Society (APS) through its Division of Physics of Beams (DPB).

1997 Annual Business Meeting of the Division at PAC97

The DPB annual business meeting will be held during PAC97 in Vancouver. It is scheduled for Thursday, May 15, 1997 in the Columbia Room of the Hotel Vancouver at 6:00 p.m. immediately after the afternoon session. The Business Meeting is an opportunity for members to discuss administrative matters including nomination procedures, appointed committees and other issues of interest to the membership. Newly promoted fellows will be announced and the Chair and Secretary-Treasurer will give their annual reports. Also planned are (1) status reports on PAC97 and the 1998 APS Spring Meeting; (2) a discussion of the implications and follow-up of the ER Composite Subpanel on the status, potential and future of accelerator physics and technology; and (3) a discussion of the nature of beam/accelerator publication in the electronic era. Please join us.

Future DPB Annual Meetings

1998 APS Spring Meeting - Columbus, Ohio, April 18-21, 1998
PAC99 - New York City, March 29 - April 2, 1999

What do you think?

Any ideas for mini-symposia? Will the PAC proceedings go fully electronic? What will then be the nature of beam/accelerator publications?

1998 APS Fellows: Call for Nominations

The deadline for fellowship nominations for this year is past. However, we are accepting nominations for next. The deadline for receipt of nominations is March 15, 1998. The original should be sent to:

Judy Franz, APS Executive Officer
APS Headquarters
One Physics Ellipse
College Park, MD 20740

along with a cover letter stating that a copy has been sent to the DPB Secretary-Treasurer (see address below). Individuals nominated but not recommended to the APS this year in addition to those nominations received after the deadline date will be considered next year. All APS members, and DPB members in particular, are encouraged to give consideration to the nomination for APS Fellowship of individuals who have made outstanding contributions to the field of Beam Physics.

Nomination forms can be obtained from APS Headquarters: contact Ken Cole at 301-209-3268 or FELLOWSHIPS@APS.ORG. Or go to the APS homepage on the web: <http://www.aps.org> and search for "Fellowship Nomination Form." If you wish to join the DPB or if you have any questions or comments, please contact:

Mel Month, Secretary-Treasurer, DPB
 Director, USPAS
 Fermilab, MS #125, P.O. Box 500, Batavia, IL 60510
 phone/fax 516-344-7156/2170, e-mail USPAS@FNAL.GOV

Robert R. Wilson Prize Fund Fully Endowed with Successful Fund Drive

Our fund drive over the past year has been successful and the Wilson Prize fund is now fully endowed. The fund balance as of February 28 is \$106,840. This allows a \$5,000 prize to be awarded each year without a fund decline. The institutional donors were:

IISSA	\$10,000	URA	\$ 8,000	AUI	\$ 5
SURA	\$ 5,000	TRIUMF	\$ 2,500		

This amounts to a total institutional contribution during the drive of \$55,500. The Wilson Prize is sponsored jointly by the DPB and the DPF.

DPB Membership Continues to Exceed 3% of APS Membership

I am happy to announce that DPB membership has remained above 3% of APS membership for more than 5 years -- that is, since a successful membership drive in the last quarter of 1992 put us over the 3% threshold for the first time. The importance of this threshold arose because a few years ago the APS established a system where divisions are represented in the APS council in proportion to their membership. If a division's membership is above 3%, it is entitled to be represented in the APS council. However, if divisional membership falls below 3% of the total APS membership, the division loses its councillor and is therefore no longer represented in the Council. Here are our membership numbers for the last six years, as measured on December 31:

Year	DPB Membership	% of APS
Membership Dec 1991	1142	
2.64% Dec 1992	1477	
3.38% Dec 1993	1466	
3.40% Dec 1994	1426	
3.42% Dec 1995	1316	
3.22% Dec 1996	1307	
3.23%		

Although we have maintained our percentage level in the last few years, it is very important to establish a balanced membership representation as the accelerator/beams field continues to expand in new areas. In the past decade, there has indeed been a remarkable expansion. Beam physics and accelerator technology continues to play an important role in high energy and nuclear physics and it is rapidly expanding in plasma physics, and in what might be termed Light Source Physics. In addition, the field is spreading into defense, medicine and industrial applications.

Currently our membership leans toward the high energy and nuclear areas. Yet it is very important to hear the voices of those representing the new and emerging areas. This can be done only with a properly balanced membership. Please help us to achieve this goal by joining the division or by encouraging your colleagues to join.

As a member of the DPB, you will play a part in electing the division's officers and councillor. With your vote and your voice in the affairs of the division, you will help determine whether the strength of the division leans toward your area or another area.

So please consider joining. If you know of a colleague who is not a DPB or an APS member, try to get him or her to join the society and the division. It is so easy. By phone, call the APS Membership Department: 301-209-3280, by e-mail MEMBERSHIP@APS.ORG. You may also look for the membership page on the WWW at <http://www.aps.org>. A regular APS membership is \$90.00. To join our division is only \$6.00. You can use a check or credit card.

This is a very exciting time for beams and accelerators and I hope that your support of future developments in our field will translate into supporting its representation in the American Physical Society.

DPB Contributions for Physics News 1996

Each year the AIP puts together highlights of physics accomplishments and publishes them in book form as well as in one of the 1997 editions of APS News. The 1996 Physics News will appear in APS News in its June 1997 issue, give or take a month. The book form, of about 60 pages, was released in April. The latter is meant for reporters, politicians and the like. If you wish to purchase a copy for \$5.00, you may order one from AIP Publishing by calling 1-800-809-2247.

The DPB contribution for this year's Physics News reviewed the highlights of the 1996 Snowmass Meeting on the "Future of Accelerator-Based Physics in the U.S." as well as the accomplishments at five of our National Laboratories, Fermilab, LANL, TJNAF, Sandia and SLAC.

The following items provide a brief summary of Snowmass 1996 and of new particle-beam developments over the past year at a number of accelerators around the country:

Snowmass Meeting on the Future of Accelerator-Based Physics in the U.S. : Nearly 500 physicists attended a three-week long workshop at Snowmass, Colorado to contemplate the future of Accelerator-Based Physics in the U.S. The meeting this year marked a turning point in the collective recovery from the cancellation of the SSC, which itself grew out of a discussion at the 1982 Snowmass meeting. The participants considered a first-time move to support a large project overseas, the Large Hadron Collider (LHC) at CERN. They also considered the Next Linear Collider (NLC) for electron-positron collisions based on the presentation of the extensive "Zeroth-Order Design Report for the NLC." Numerous study groups discussed various advanced acceleration techniques, possible upgrade plans at the Fermilab Tevatron, ideas for a muon collider, and concepts for a large hadron collider.

Fermilab: On February 25, 1996 the 1994-96 Tevatron collider run ended and the reconfiguration of the Tevatron in support of fixed target operations began. The success of this extensive running period can be measured partly in terms of luminosity, the parameter (in units of inverse barns, equivalent to a cross section of 10^{-24} cm²) which describes the intensity of the proton and antiproton beams that are brought to bear in the interaction areas. In this case the integrated luminosity of about 150 inverse picobarns was delivered to each of the two detectors (CDF and D0), while the peak luminosity was 2.5×10^{31} cm⁻² sec⁻¹ ---twenty five times the initial Tevatron performance specification. Data collected during this run led to the long-sought discovery of the top quark (see Physics News in 1995, p. 55). Significant progress has been made on the Main Injector project at Fermilab. The project is approximately 70% complete with commissioning expected to commence in Spring 1998. The goal is to improve by a factor of five the collider luminosity. In addition a design has been completed for a new Antiproton storage ring, the "Recycler", which would reside in the existing Main Injector enclosure and boost luminosity performance by an additional factor of two. This project is currently under review by the Department of Energy. Longer term efforts at Fermilab include R&D into electron cooling, muon colliders, and plasma beat-wave acceleration.

Los Alamos National Laboratory: The Accelerator Production of Tritium (APT) facility plans call for an accelerator with an average beam power of over 150 MW. The APT would produce tritium in sufficient quantities to replace the amount that decays owing to the 12.3 year half life. The APT design is based on a 1700 MeV, 100 mA cw beam of protons produced by a linear accelerator. The beam strikes a tungsten target producing neutrons that are moderated in a surrounding blanket and then captured in helium-3 to make tritium. The assembly and testing of the 20 MeV Low Energy Demonstration Accelerator (LEDA) has started at LANL. The proton injector for LEDA routinely provides 120 mA at 75 keV with the required beam quality. The project is headed by LANL and includes LLNL, BNL, and Westinghouse Savannah. The DOE has selected Burns and Roe Enterprises, Inc. as the prime contractor.

Sandia National Laboratory, Particle Beam Fusion Accelerator: The PBFA-Z achieved a milestone by generating 1.6 MJ of soft x rays by operating in the z pinch mode. A plasma pinch is created by passing the stored energy of the PBFA through an array of

tiny wires. The pulse of current in the axial, or Z direction, causes the plasma to implode, releasing over half of the stored energy in an x-ray pulse. In the PBFA-Z experiment, the peak x-ray power was above 110 TW, and the x-ray pulse width was about 8 ns full width at half maximum. X-ray data were taken using x-ray diodes, resistive bolometers, time-integrated and time-resolved spectrometers, and photoconducting detectors. The z-pinch load consisted of 120 tungsten wires, 10 microns in diameter, configured in a cylindrical array at a diameter of 4 cm and a length of 2 cm. The design goal for PBFA-Z is 1.5 MJ and 150 TW of x-ray energy and power. This energetic, intense source of soft x rays will be used in experiments at high energy density for studying inertially confined fusion (ICF), weapons physics, and weapons effects applications.

Stanford Linear Accelerator Center: SLAC's newest accelerator, the NLCTA (short for the Next Linear Collider Test Accelerator) reached a major milestone in August with the first electron beam accelerated to 65 MeV with an acceleration gradient of 50 MV/m. The NLCTA is part of SLAC's on-going development of accelerator and microwave power technology for a future electron-positron linear collider, dubbed the "Next Linear Collider" (NLC). The NLCTA operates at an RF frequency of 11.4GHz, four times the SLAC frequency and with a gradient more than double that of the SLAC linac.

Thomas Jefferson National Accelerator Facility: Formerly called the Continuous Electron Beam Accelerator Facility, this \$600M construction project was completed on schedule and within budget. It was officially dedicated on May 24, 1996 and renamed the Thomas Jefferson National Accelerator Facility, (Jefferson Lab). The performance of the accelerator has been excellent, delivering in the last 10 months over 3200 hours of beam time for physics. Superconducting accelerator cavities have performed so well at a nominal energy of 4 GeV that a 5-GeV run is planned in early 1997, while 6 GeV is expected in early 1998. Initial data shows that the accelerator is stable enough for serious parity-violation experiments. In one of the experimental areas, Hall C, the equipment is installed and fully functioning for users. Five experiments have run, with two more expected to be complete by the end of the calendar year. First beam has been sent to Hall A, and Hall B is on track for completion with all six calorimeters installed and a first commissioning run scheduled for after Thanksgiving 1996.

1998 US Particle Accelerator School Prize for Achievement in Accelerator Physics and Technology

Call for Nominations

The US Particle Accelerator School invites nominations for prizes awarded on a competitive basis for outstanding accomplishment in accelerator physics and technology. Nominations should include name and institution of candidate and a description of the accomplishment with supporting documents. Submit nominations not later than November 1, 1997 to:

US Particle Accelerator School
c/o Fermilab MS #125
P.O. Box 500
Batavia, IL 60510
phone/fax 630-840-3896/8500, e-mail USPAS@FNAL.GOV.

Prizes will be presented at the 1998 DPB Annual Meeting during the APS Spring Meeting in Columbus, Ohio, April 18-21, 1998. Normally 2 prizes each of \$2,000 are awarded. They are made possible by donations from the Southeastern Universities Research Association, the Universities Research Association, Varian Vacuum Products Division, Westinghouse Electric Corporation and John Wiley and Sons Publishers. This is a prize of the USPAS Board of Governors. Past winners:

1985

Helen T. Edwards, Fermi National Accelerator Laboratory
John M.J. Madey, Stanford University
Special Historic Award

Ernest D. Courant, Brookhaven National Lab
M. Stanley Livingston, MIT
Robert R. Wilson, Cornell University

1986

Helmut Piel, Wuppertal University, Germany
Maury Tigner, Cornell University
Thomas Weiland, DESY

1987

Klaus Halbach, Lawrence Berkeley Laboratory
Lars Thorndahl, CERN

1988

I.M. Kapchinskii, ITEP, Moscow
V.A. Teplyakov, IHEP, Serpukhov
Andrew M. Sessler, Lawrence Berkeley Laboratory

1989

Daniel L. Birx, Lawrence Livermore National Laboratory
Karl L. Brown, Stanford Linear Accelerator Center

1990

Donald Prosnitz, Lawrence Livermore National Laboratory
Matthew Sands, University of California, Santa Cruz

1991

Glen R. Lambertson, Lawrence Berkeley Laboratory
Wolfgang Schnell, CERN

1993

Richard L. Sheffield and John S. Fraser, LANL
Marc C. Ross, Stanford Linear Accelerator Center

1995

Herman Winick, Stanford University
James E Spencer, SLAC

Tsumoru Shintake, KEK
1997
Daniel Boussard, CERN
Chan Joshi, UCLA

**1998 American Physical Society Robert R. Wilson Prize
"To Recognize and Encourage Outstanding Achievement in the Physics of
Particle Accelerators"**

Call for Nominations

Nominations are open to scientists of all nations regardless of the geographical site at which the work was done. The prize shall ordinarily be awarded to one person but may be shared among recipients when all recipients have contributed to the same accomplishment. The prize will normally be awarded for contributions made at an early stage of the recipient's career. Nominations of candidates shall remain active for three years. Send the name of the proposed candidate and supporting information before June 1, 1997 to:

Claudio Pellegrini
Department of Physics
UCLA
405 Hilgard Ave.
Los Angeles, CA 90095-1547
phone/fax 310-206-1677/1091
e-mail CLAUDIO@VESTA.PHYSICS.UCLA.EDU

The prize was established in 1986 by the Division of Particles and Fields and the Division of Physics of Beams. It is sponsored by the friends of Robert R. Wilson. The prize will be presented at the DPB annual meeting during the APS Spring Meeting in Columbus, Ohio, April 18-21, 1998. The prize consists of \$5,000, an allowance for travel to the meeting at which the prize is awarded, and a certificate citing the contributions made by the recipient. Past Winners:

1987 Ernest D. Courant, Brookhaven National Laboratory 1988 Donald W. Kerst, University of Wisconsin 1989 Martin N. Wilson, Oxford Instruments, England; and Alvin V. Tollestrup, Fermi National Accelerator Lab 1990 Kjell Johnsen, CERN 1991 John Reginald Richardson, UCLA 1992 Rolf Wideroe, Switzerland 1993 John P. Blewett, Brookhaven National Laboratory 1994 Thomas Collins, Fermi National Accelerator Lab; and Gustav-Adolph Voss, DESY 1995 Raphael M. Littauer, Cornell University 1996 Albert J. Hofmann, CERN 1997 Andrew M. Sessler, LBNL

**1998 American Physical Society Award
for Outstanding Doctoral Research in Beam Physics**

Call for Nominations

The Division of Physics of Beams invites nominations for the 1998 APS Award for the most outstanding Doctoral Research in Beam Physics. A nomination will be accepted for any doctoral student of a university in the United States or abroad, for work performed as part of the requirements for a doctoral degree. Nominees must pass their thesis defense not more than 18 months before the nomination deadline. An individual can only be nominated once; however an unsuccessful candidate can be carried over for 1 year. Nominations should include a letter of nomination, five copies of the thesis and/or equivalent publications, a letter from the thesis advisor delineating in detail contributions of the nominee, the nominee's graduate course record and three independent references, if possible. Submit nominations not later than June 1, 1997, to

Alexander Chao
SLAC/Stanford University
P.O. Box 4349
Stanford, CA 94309
phone/fax 415-926-2985/4999
e-mail ACHAO@SLAC.STANFORD.EDU

The award consists of \$1500 and a certificate to be presented during the DPB annual meeting at the APS Spring Meeting in Columbus, Ohio, April 18-21, 1998. There is an additional allowance of \$500 for travel and the winner will be invited to present his/her work as an Invited Paper. The award was established by the APS Division of Physics of Beams in 1991 and is supported by the Universities Research Association (URA). Past Winners:

1991 Jeffrey P. Calame, University of Maryland 1992 David H. Whittum, University of California, Berkeley 1993 John A. Palkovic, University of Wisconsin, Madison 1994 Tor Raubenheimer, Stanford University 1995 Dun Xiong Wang, University of Maryland 1996 Dan T. Abell, University of Maryland 1997 Linda Spentzouris, Northwestern University

Division Elected and Standing Committees

The DPB, as other APS divisions, functions with a committee structure. Our success in representing the community, in formulating and helping to implement change for the betterment of our community, depends on democratic participation in all division activities, an important part of which is membership in its standing committees. Standing committees are division committees appointed by the Executive Committee Chair, except for a few statutory positions stipulated in the division bylaws. Currently the DPB has six active standing committees: the Nominating Committee, the Program Committee, the Fellowship Committee, the Publications Committee, the Education Committee and the Bylaws Committee. We also have responsibility for two APS committees, the R.R. Wilson Prize Committee and the Beam Physics Doctoral Research Award Committee. The committee which serves as the operating mechanism for the Division is the Executive Committee. Its members are elected by the Division's membership. The Divisional Councillor, our representative to the APS Council, also serves as a member of our Executive Committee and is also elected by the Division's membership. Information on how you might serve on these committees and calls for

nomination for 1998 committees will be forthcoming in a Newsletter later this year. In the meantime, if you have any comments, suggestions or questions, please contact the Secretary-Treasurer.

USPAS/DPB Desk at PAC97

As at past DPB Annual Meetings, the US Particle Accelerator School will have a desk at PAC97 in Vancouver, May 12-16, 1997. Information on USPAS programs will be available, including upcoming schools, the new IU/USPAS Master's Program, USPAS prizes, and the School book programs. Many USPAS books, including those published by the American Institute of Physics and John Wiley and Sons will be available for inspection and purchase. In addition, application forms for APS and IEEE membership and related information will be available at the desk.

1997 USPAS at MIT, June 16-27, 1997

As part of its program, the US Particle Accelerator School, in association with universities across America, organizes two week schools of intense, graduate-level and more recently, undergraduate courses in beam physics and accelerator technology. There are about 7 courses conducted in parallel offered at each school. By successfully completing the requirements for a full two-week program, a student will earn the equivalent of three semester hours of credit. In the summer of 1997 the program will be at MIT, June 16-27, 1997. For course descriptions or an application, contact the School Office at Fermilab (phone 630-840-3896, or by e-mail USPAS@FNAL.GOV) or visit <http://fnalpubs.fnal.gov/uspas>. The next two schools are being planned for the University of Texas at Austin in January of 1998 and Stanford University in June of 1998.

New Opportunity in Education:

Master of Science Degree in Beam Physics and Technology Indiana University/US Particle Accelerator School

In addition to traditional programs, the US Particle Accelerator School and Indiana University are proud to announce a new partnership offering you an opportunity to earn a Master of Science Degree in beam physics and technology from Indiana University. Participants in the program earn credit toward the Indiana University diploma at our standard USPAS/University-sponsored courses. Briefly, the degree and admission requirements are:

Degree Requirements

- 30 Credit Hours (cr): Grade point average B or above
- 6 IU/USPAS Courses (18 cr)
- Classical Mechanics (3 cr) and Electromagnetism (3 cr)
- Master's Thesis (6 cr)

Final Examination **or** oral defense of thesis

Admission Requirements:

University transcripts from universities you attended as an undergraduate
or graduate student
Completed admissions applications
Three letters of recommendations
Outline your interest in beam physics and technology (300-500 words)
Graduate Record Examination, if available (may be requested depending on your
other qualifications)
Application Fee: \$40 US

To start this degree program, contact the USPAS (uspas@fnal.gov, 630-840-3896)

Respectfully,

Mel Month, DPB Secretary-Treasurer
USPAS Director