JOHN D. FOX
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EDUCATION:

Ph.D. Applied Physics, Stanford University, 12/85.
Ph.D. Minor in Electrical Engineering, Stanford University.

Thesis: “Sensing with High-Frequency Ultrasound in Air.” This work involves transducers and systems operating in air at .3-10 MHz for rangefinders, imaging microscopes, and surface profile measurements.

Courses: theoretical and applied physics, mathematical methods, and electrical engineering. Advanced work in superconducting devices, lasers, picosecond optics and electronics, semiconductor physics, medical imaging systems, and storage ring physics.

M.S. Applied Physics, Stanford University, 3/83.
B.A. Physics, Harvard University, 9/77.

WORK EXPERIENCE:

1/90-present Group Leader, Accelerator Research Department,, Stanford Linear Accelerator Center.

Administrative and technical leader of a group comprising SLAC staff and Stanford M.S. and Ph.D. candidates. Research areas center on accelerator dynamics and instability control for particle accelerators, technology development for beam instrumentation. Research and development of feedback control systems incorporating wideband (3 GHz) analog front ends, 500 MHz sampling rates and multiple DSP processors for feedback signal computation. Individual technical contributor for a synchrotron oscillation control system incorporating parametric damping techniques. Research and thesis supervision for Stanford Ph.D. students in Applied Physics and Electrical Engineering and research supervisor for Stanford M.S. Electrical Engineering students.

The effort on feedback control for particle beam instabilities has progressed from a research program through to fabrication of 14 complete feedback systems for use at US, European and Asian national laboratories. These systems include the group's 80 processor DSP array and microwave signal processing functions as well as the software control and analysis tools required for operation of the system.

8/87-12/89 Electronic Engineer, Stanford Linear Accelerator Center.

Deputy Program Manager for Electronics, SLD Detector (a $16M component of a $60M experiment). Technical manager of the engineering group designing data acquisition systems for high-energy physics experiments. Responsible for analysis, system design, and specification of low noise analog preamplifiers, transient digitizers, and FASTBUS based digital signal processing systems. Individual technical contributor for a 119 MHz phase-locked master oscillator and a 32 MHz fiber optic serial data network.

12/86-6/87 Research Staff Member, IBM Almaden Research Center.

Basic research and technology development for optical data storage. Authored two patent disclosures on optical servo systems and data detection signal processing.

10/85-10/86 Research and Development Engineer, Stanford Photon Research Laboratory.

Project Engineer at Stanford's storage ring facility for synchrotron radiation and free electron laser research. Responsible for analysis and design of a 716 MHz master oscillator, distributed timing and Linac injection system, and magnetic measurement instrumentation. Organizational duties included initial laboratory staff selection and writing design reports.

1/78-5/83 Electronics Engineer, Stanford Linear Accelerator Center.

Responsible for instrumentation and control systems for the 36 GeV PEP colliding beam storage ring and the 100 GeV Stanford linear collider project. Analysis, design, and development of instruments, diagnostics, and real-time control and feedback systems for particle accelerators and storage rings.

11/75-6/76 Project Engineer, IMSAI, San Leandro, CA.

Design and development of 8080 based small computer systems. Experience with wide variety of mini/ microcomputer peripherals and I/O devices. Responsibilities included product development and creating product proposals.

TEACHING EXPERIENCE:

2000-2001 Stanford Dean's Award for Distinguished Teaching
6/99-Present Consulting Professor, Applied Physics, Stanford University
6/93-6/99 Consulting Associate Professor, Applied Physics, Stanford University
6/91-6/93 Acting Assistant Professor, Applied Physics, Stanford University
9/89-6/91 Lecturer in Applied Physics, Stanford University.

Invited by the Stanford Applied Physics department to propose and develop a new two quarter graduate course in laboratory electronics. Planned syllabus and lab exercises. Responsible for all class lectures and supervision of two lab teaching assistants for 15 years.Obtained grant and foundation support to completely equip a new student laboratory including CAE workstations and tools.

Co-developed (with Prof. Ted Geballe) Applied Physics 79Q "Energy Choices for the 21st Century". This seminar class has been offered four times as part of the Sophomore Undergraduate Seminar program.

US Particle Accelerator School Courses

Co-Developed (with H. Hindi, one of my Ph.D. students) "Control Theory with Applications to Accelerators", an intensive 3 unit (15 lecture hour) course. The class presents central concepts of modern control theory (including state space representations, feedback, estimation and optimal LQR and LQG control)) and develops example applications for accelerator control problems. The course includes 5 Matlab based computer control exercises. Class taught at Duke University (1995) and U.C. Berkeley (1997)

Developed "RF Engineering and Signal Processing", a 3 unit course on microwave/RF circuitry and signal processing techniques. The class includes hands-on laboratory exercises as well as computer exercises. Class taught at William and Mary (2004) and Cornell University (2005).

4/82-7/84 Instructor of Physics, Physics Department, Stanford University.
Faculty for Physics 106, a course in computer methods for the laboratory. Developed course content and student laboratories. Taught lecture and laboratory sessions.

8/76-6/77 Teaching Assistant, Physics Department, Harvard University.
Laboratory instructor for Physics 123, a graduate/undergraduate laboratory electronics course.

ELECTRONIC SKILLS:

Analog Design: Extensive experience in linear signal processing and feedback control systems. Comprehensive A/D, D/A experience with particular expertise in high-speed sampling techniques. Analog signal processing experience includes phase-locked loops and synchronous detectors; high-frequency experience includes work with wideband pulse processing systems. Experience with Spice (PSpice, HSpice) and other circuit modeling techniques.

RF Design: Experience with S-parameter design techniques; fabrication of 10 MHz-3 GHz systems using waveguide, coax, stripline, and microstrip. Experience with broadband modulation techniques, antennas and high-power RF stages. Special expertise in pulsed phase and amplitude measurement techniques.

Digital Skills: Logic design with CMOS, TTL, and ECL families; comprehensive experience with PAL/GAL, FPLS, ALTERA and XILINX FPGA programmable logic. Hardware and assembly language design experience with 6800,

68HC11, 8085, and 80186/80188 systems; design and microcoding experience with 2900 series bit slice processors. DSP hardware and coding experience with AD2100 and AT+T 1610 series processors, familiarity with Motorola 56000 and TI 320 series fixed point processors. Extensive design experience with VME/VXI, CAMAC and NIM electronic modules and systems, familiarity with FASTBUS, multibus, CAN-bus and GPIB systems and protocols. Extensive experience with digital simulation and system design CAE tools (Viewlogic) including VHDL modeling languages.
Computer Systems: Experience with UNIX,VMS and PC computer systems; high-level language experience in Matlab, C, Fortran, BASIC, PPL, PLM, and other structured languages. Design and system experience with HDLC/ SDLC local area networks using baseband and broadband modulation techniques.

BIOGRAPHICAL INFORMATION:

Place of Birth: Chicago, Illinois.

Among my more useful and unusual credentials are certificates in advanced engine performance, engine repair, engine tune-up, manual transmissions and rear axles, suspensions and steering, electrical systems, and brakes from the National Institute for Automotive Service Excellence (ASE). Avid recreational cyclist for balance.

Publications and Talks

Fox, J. , “Klystron Linearizers for PEP-II”, Invited talk at the LLRF05 workshop, CERN, Geneva, October 2005

J. Fox, S. Gallo, T. Mastorides, D. Teytelman, D. Van Winkle and Y. B. Zhou, “Klystron Linearizer for use with 1.2 MW 476 MHz Klystrons in PEP-II RF Systems”, Presented at the 2005 Particle Accelerator Conference (PAC 2005) Knoxville, Tn, May 2005

Daniel Van Winkle, John Fox, Dmitry Teytelman, “In Depth Diagnostics for RF System Operation in the PEP-II B Factory”, Presented at the 2005 Particle Accelerator Conference (PAC 2005) Knoxville, Tn, May 2005

D Teytelman, D. Van Winkle, J. Fox (SLAC), "Operating Performance of the Low Group Delay Woofer Channel in PEP-II." SLAC-PUB-11253, PAC-2005-MPPP007, May 2005.

D. Teytelman, R. Akre, J. Fox, S. Heifets, A. Krasnykh, D. Van Winkle, and U. Wienands, “Measurements of Transverse Coupled-Bunch Instabilities in PEP-II”, Presented at the 2004 European Particle Accelerator Conference (EPAC 2004) Lucerne, Switzerland, July 2004

D. Teytelman, L. Beckman, D. Van Winkle, J. Fox, and A. Young, “Development and Testing of a Low Group-delay Woofer Channel for PEP-II”, Presented at the 2004 European Particle Accelerator Conference (EPAC 2004) Lucerne, Switzerland, July 2004

L. Beckman, N. Hassanpour, L. Sapozhnikov, D. Teytelman, J. Fox, “Low-Mode Coupled Bunch Feedback Channel for PEP-II”, presented at the 2003 Particle Accelerator conference

A. Drago, A. Gallo, A. Ghigo, and M. Zobov, J. D. Fox and D. Teytelman, “Longitudinal quadrupole instability and control in the Frascati DAFNE electron ring”, Phys. Rev. ST Accel. Beams 6, 052801 (2003)

A. Drago, J. Fox, M. Serio, D. Teytelman "Report on DAFNE longitudinal quadrupole measurements done on 9-12 November 2002", DAFNE Technical Note BM-10

D. Teytelman and J. Fox "Set-up of PEP-II Longitudinal Feedback Systems for Even/Odd Bunch Spacings", Presented at the Beam Instrumentation Workshop, Upton NY, May 2002

D. Teytelman, J. Fox, S. Prabhakar (SLAC), J.M. Byrd (LBL, Berkeley & UC, Davis),"Characterization Of Longitudinal Impedances in Storage Rings via Multibunch Effects", SLAC-PUB-9106, Jan 2002. 11pp. Published in Phys.Rev.ST Accel.Beams 4:112801,2001

J. Fox, "Multi-Bunch Instability Control, with Limitations (Ultimate and Other)", (Invited), Presented at the July 2001 Snowmass Workshop on the Future of High Energy Physics.

S. Prabhakar, J. Fox, D. Teytelman ,"New Diagnostics And Cures For Coupled-Bunch Instabilities" (INVITED). PAC-2001-WOAA002, Aug 2001. 5pp. Presented at IEEE Particle Accelerator Conference (PAC2001), Chicago, Illinois, 18-22 Jun 2001.

D. Teytelman, J. Fox, S. Prabhakar (SLAC), J. Byrd (LBL, Berkeley), "Frequency Resolved Measurement of Longitudinal Impedances Using Transient Beam Diagnostics".SLAC-PUB-8884, PAC-2001-WOPA006, Jun 2001. 4pp. Presented at IEEE Particle Accelerator Conference (PAC 2001), Chicago, Illinois, 18-22 Jun 2001.

J. Jacob, V. Serriere (ESRF, Grenoble), J. Byrd, S. De Santis, G. Stover (LBL, Berkeley), M. Georggson (MAXLab), J. Fox, D. Teytelman (SLAC),"Harmonic Cavities and Longitudinal Beam Stability in Electron Storage Rings" (INVITED). PAC-2001-WOPA001, Aug 2001. 5pp. Presented at IEEE Particle Accelerator Conference (PAC2001), Chicago, Illinois, 18-22 Jun 2001.

C. Biscari, A. Drago, A. Gallo, A. Ghigo, F. Marcellini, C. Milardi, M. Serio, A. Stella, M. Zobov (INFN), J. Fox, D. Teytelman (SLAC), "High Current Multibunch Operation at DAPHNE",PAC-2001-RPPH130, Aug 2001. 3pp. Presented at IEEE Particle Accelerator Conference (PAC2001), Chicago, Illinois, 18-22 Jun 2001.

S. Prabhakar, J. Fox and D. Teytelman, “Curing Coupled-Bunch Instabilities with Uneven Fills”, Phys. Rev. Lett. 86, No. 10 (2001) 2022-2025

J. Byrd, S. De Santis, M. Georgsson, G. Stover, J. Fox, D. Teytelman, “Commissioning of a higher harmonic RF system for the Advanced Light Source”, Nuclr. Inst. Meth. A 455 (2000) 271-282

J. Fox, et al, “Programmable DSP-Based multi-bunch feedback - operational experience from six installations”, presented at the Beam Instrumentation Workshop, Cambridge Massachusetts, May 2000

D. Teytelman, et al,’“Design and implementation of IIR algorithms for control of longitudinal coupled-bunch instabilities”, presented at the Beam Instrumentation Workshop, Cambridge Massachusetts, May 2000

J. Fox, “Feedback Systems for Synchrotron Light Sources”, Invited Talk at the ESRF Workshop on Mastering Beam Instabilities in Synchrotron Light Sources, Grenoble, France, March 2000

J. Fox, “Beam Instrumentation and Feedback”, Invited Lectures at the 1999 Asian Accelerator School, Beijing, China November 1999

D. Teytelman, R. Claus, J. Fox, H. Hindi, I. Linscott, S.Prabhakar, W. Ross, A. Young, A. Drago, and M. Serio, ”Architecture and technology of 500 Msample/s feedback systems for control of coupled-bunch instabilities”, Proceedings of the 1999 ICALEPS conference

S. Prabhakar, J. D. Fox, D. Teytelman, and A. Young, “Phase Space Tracking of Coupled-Bunch Instabilities”, Phys. Rev. ST Accel. Beams ***2,***084401 (1999) (online journal http://prst-ab.aps.org/)

J. Fox, R. Larsen, S. Prabhakar, D. Teytelman, A. Young, SLAC, A. Drago, M. Serio, INFN Frascati, W. Barry, G. Stover, LBL, “Multi-Bunch Instability Diagnostics via Digital Feedback Systems at PEP-II, DAFNE, ALS and SPEAR”, Proceedings of the 1999 Particle Accelerator Conference (Invited Talk)

S. Prabhakar, D. Teytelman, J.Fox, M. Minty, U. Wienands, A. Young, SLAC, W. Barry, LBL, “Measurements of a Fast Vertical Instability in the PEP-II HER”, SLAC-PEP-II-AP-NOTE-99-04

S. Prabhakar, J. Fox, H. Hindi, D. Teytelman, A. Young, “Calculation of Impedance from Multi-bunch Synchronous Phases: Theory and Experimental Results”, Proceedings of the 1998 European Particle Accelerator Conference

J. Fox, H. Hindi, R. Larsen, S. Prabhakar, D. Teytelman, A. Young, SLAC, A. Drago, M. Serio, INFN Frascati, G. Stover, LBL “Multi-Bunch Longitudinal Dynamics and Diagnostics via a Digital Feedback System at PEP-II, DAFNE, ALS and SPEAR”, Proceedings of the 1998 European Particle Accelerator Conference (paper presented June 1998)

J. Fox and E. Kikutani, “Bunch Feedback Systems and Signal Processing”, Invited tutorial at t the US-CERN-Japan-Russia School on Beam Measurements, Montreaux, Switzerland May 1998

D. Teytelman, J. Fox, H. Hindi, C. Limborg, I. Linscott, S. Prabhakar, J. Sebek, A. Young, SLAC, A. Drago, M. Serio, INFN Frascati, W. Barry, G. Stover, LBL “Beam Diagnostics based on Time-Domain Bunch-by-Bunch Data”, Proceedings of the 1998 Beam Instrumentation Workshop

S. Prabhakar, D. Teytelman, J. Fox, A. Young, P. Corredoura “Commissioning Experience from PEP-II HER Longitudinal Feedback”, Proceedings of the 1998 Beam Instrumentation Workshop

S. Prabhakar, “Beam Diagnostics and Experiments on Multibunch Longitudinal Dynamics using a Digital Feedback System at PEP-II, ALS and SPEAR”, Presented at the April 1998 meeting of the American Physical Society, Columbus, Ohio

S. Prabhakar, P. Corredoura, J. Fox, D. Teytelman, R. Tighe, A. Young, “Low-mode Longitudinal Motion in the PEP-II HER”, SLAC-PEP-II-AP-NOTE-98-06

S. Prabhakar, J. Fox, H. Hindi, D. Teytelman, A. Young, “Calculation of impedance from multibunch synchronous phases: Theory and experimental results”, SLAC-PEP-II-AP-NOTE-98-04,Feb 98

A. Young, J. Fox and D. Teytelman, “RF and Baseband Signal Processing in the PEP-II/ALS/DAFNE Longitudinal Feedback System”, in Proc. Beam Diagnostics and Instrumentation for Particle Accelerators (DIPAC 97), Frascati, Italy, (1997)

D. Teytelman, R. Claus, J. Fox, H. Hindi, R. Larsen, I. Linscott, S. Prabhakar, W. Ross, A Young, A. Drago, M. Serio and G. Stover, “Accelerator Diagnostic Techniques Using Time-Domain Data from a Bunch-by-Bunch Longitudinal Feedback System,” in Proc. Beam Diagnostics and Instrumentation for Particle Accelerators (DIPAC 97), Frascati, Italy, (1997) (Invited Talk)

S. Prabhakar, J.Fox, H.Hindi, “A Matrix Formalism for Landau Damping,” talk given at the Advanced ICFA Workshop on Beam Dynamics Issues for e+e- Factories, Frascati, Oct. 1997. To be published in “Frascati Physics Series.”

J. Fox, R. Claus, H. Hindi, R. Larsen, I. Linscott, S. Prabhakar, W. Ross, D. Teytelman and A. Young, “Transient-Based Beam Diagnostics for Coupled-Bunch Instabilities”, Talk contributed to the International Workshop on Multi-Bunch Instabilities in Future Electron and Positron Accelerators, KEK, Tsukuba, Japan (1997)

S.Prabhakar, R.Claus, J.Fox, H.Hindi, I.Linscott, J.Olsen, W.Ross, D.Teytelman, “Observation and Modal Analysis of Coupled-Bunch Longitudinal Instabilities via a Digital Feedback Control System,” *Particle Accelerators*, 57/3, 1997.

A. Young, J. Fox and D. Teytelman, “VXI based Multibunch Detector and QPSK Modulator for the PEP-II/ALS/DAFNE Longitudinal Feedback Systems”, in Proc. Particle Accelerator Conference, Vancouver, (1997)

D. Teytelman, R. Claus, J. Fox, H. Hindi, R. Larsen, I. Linscott, S. Prabhakar, W. Ross, A Young, A. Drago, M. Serio and G. Stover, “Control of Multibunch Longitudinal Instabilities and Beam Diagnostics Using a DSP-Based Feedback System,” in Proc. Particle Accelerator Conference, Vancouver, (1997)

H.Hindi, S.Prabhakar, J.D.Fox, D.Teytelman, “Design and Verification of Controllers for Longitudinal Oscillations Using Optimal Theory and Numerical Simulation: Predictions for PEP-II,” in Proc. Particle Accelerator Conference, Vancouver, (1997).(Also SLAC PEP-II AP NOTE 97:20)

S. Prabhakar, D.Teytelman, J.Fox, H.Hindi, “Use of Digital Feedback System as a Bunch by Bunch Current Monitor: Results from ALS,” SLAC PEP-II AP NOTE 96:29, (1996)

H. Hindi, S. Prabhakar, D. Teytelman and J. Fox, “Clustering Using a Pairwise Nearest Neighbor (PNN) Algorithm”, PEP-II AP Note No. 96.26, (1996)

PUBLICATIONS and TALKS

Fox, J. D. et al, “Analysis, Control and Modal Analysis of Coupled-Bunch Longitudinal Instabilities”, Proceedings of the 1996 European Particle Accelerator Conference, Sitges, Spain 6/96

Teytelman, D., et al, “Feedback Control and Beam Diagnostic Algorithms for a Multi-processor DSP System”, Proceedings of the 1996 Accelerator Instrumentation Workshop, Chicago, IL 5/96

Fox, J. D., “Analysis and Control of Multi-Bunch Longitudinal Instabilities Using Digital Signal Processing”, (Invited Talk) American Physical Society Meeting, Indianapolis, IN 5/96

Fox, J. D.,“Control Theory with Applications to Accelerators”, (Invited Talk) International Conference on Accelerator and Large Experimental Physics Control Systems, Chicago, IL 11/95

Teytelman, D. et al, “Operation and Performance of the PEP-II Prototype Longitudinal Damping System at the ALS”, Proceedings of the 1995 Particle Accelerator Conference, Dallas TX 5/95

Teytelman, D. et al, “Operation and Performance of a Longitudinal Feedback System Using Digital Signal Processing”, Proceedings of the 1994 Accelerator Instrumentation Workshop, Vancouver B.C. 10/94

Oxoby, G. et al, “Bunch by Bunch Longitudinal Feedback System for PEP-II”, Proceedings of the 1994 European Particle Accelerator Conference, London, England 6/94

Fox, J. D. et al “Operation and Performance of a Longitudinal Damping System Using Parallel Digital Signal Processing”, Proceedings of the 1994 European Particle Accelerator Conference, London, England 6/94

Sapozhnikov, L., J. Fox, J. Olsen, G. Oxoby, I. Linscott, A. Drago and M. Serio, “A Longitudinal Multi-Bunch Feedback System using Parallel Digital Signal Processors”, Proceedings of the 1993 Accelerator Instrumentation Workshop, Santa Fe, NM 10/93

Hindi, H., L. Sapozhnikov, J. Fox, S. Prabhakar, G. Oxoby, I. Linscott and A. Drago, “Measurement of Multi-Bunch Transfer Functions Using Time Domain Data and Fourier Analysis”, Proceedings of the 1993 Accelerator Instrumentation Workshop, Santa Fe, NM 10/93

Fox, J. D., N. Eisen, H. Hindi, I. Linscott, G. Oxoby, L. Sapozhnikov and M. Serio, “Feedback Control of Coupled-Bunch Instabilities”, (Invited Paper) Proceedings of 1993 Particle Accelerator Conference, Washington D.C. 5/93

Hindi, H., N. Eisen, J. Fox, I. Linscott, G. Oxoby, L. Sapozhnikov and M. Serio, “Analysis of DSP-based Longitudinal Feedback System: Trials at SPEAR and ALS”, Proceedings of the 1993 IEEE Particle Accelerator Conference, Washington D.C. 5/93

Fox, J. D., N. Eisen, H. Hindi, G. Oxoby, L. Sapozhnikov, I. Linscott and M. Serio, “Multi-Bunch Feedback - Strategy, Technology and Implementation Options”, (Invited Paper) Proceedings of the 1992 Accelerator Instrumentation Workshop, AIP Conference Proceedings No. 281

Fox, J. D., D. Briggs, N. Eisen, H. Hindi, W. Hosseini, G. Oxoby, I. Linscott, O. Coiro, A. Ghigo, M. Serio, G. Lambertson and F. Voelker, “Feedback Implementation Options and Issues for B Factory Accelerators”, Invited Talk at the 1992 B Factory Workshop, Proceedings of B Factories - the State of the Art in Accelerators, Detectors and Physics, 4/92, 208-215.

Fox, J. D. and P. Corredoura, “Amplification and Damping of Synchrotron Oscillations via a Parametric Process”, Proceedings of the third European Particle Accelerator Conference, 3/92, 1079-1081

H. Hindi, W. Hosseini, D. Briggs, J. Fox and A. Hutton, “Down Sampled Signal Processing for a B Factory Bunch by Bunch Feedback System”, Proceedings of the third European Particle Accelerator Conference, 3/92, 1067-1069

Briggs, D., P. Corredoura, J. D. Fox, A. Gioumousis, W. Hosseini, L. Klaisner, J. L. Pellegrin, K. A. Thompson and G. Lambertson, “Prompt Bunch by Bunch Synchrotron Oscillation Detection by a Fast Phase Measurement”, Proceedings of the IEEE Particle Accelerator Conference, 5/91, 1404-1406.

Briggs, D., J. D. Fox, W. Hosseini, L. Klaisner, P. Morton, J. L. Pellegrin, K. A. Thompson and G. Lambertson, “Computer modeling of bunch by bunch feedback for the SLAC B-factory design”, Proceedings of the IEEE Particle Accelerator Conference, 5/91, 1407-1409.

Fox, J. D. and D. Horelick, “Analysis and Simulation of the SLD WIC Pads Hybrid Preamplifier Circuitry,” IEEE Trans. on Nuclear Science, Vol. 38, No. 2, 63-68 (1991)

Haller, G., D. Freytag, J. Fox, J. Olsen, L. Paffrath, A. Yim and A. Honma, “The Front-End Analog and Digital Signal Processing Electronics for the Drift Chambers of the Stanford Large Detector,” IEEE Trans. on Nuclear Science, Vol. 38, No. 2, 363-369 (1991)

Fox, J. D. and the SLD Engineering Staff, “Electronic Technology and the SLD Detector”, Nuclear Physics B, Vol. 23A, 227-238 (1991)

Linscott, I., J. Twicken, E. Linstadt, J. Duluk, J. Burr, A. Peterson, and J. Fox, “The MCSA II - A Broadband, High Resolution, 60 Mchannel Spectrometer, “Proceedings of the IEEE Asilomar Conference on Signals, Systems and Computers, 11/89, 502-508.

Haller, G., J. Fox, D. Nelson, and S. Smith, “The Liquid Argon Calorimeter System for the SLD Large Detector,” IEEE Trans. on Nuclear Science, Vol. 36, No. 1, 675-679 (1989).

Fox, M. J. and J. Fox, “A Cryogenic Monitor System for the Liquid Argon Calorimeter in the SLD Detector,” IEEE Trans. on Nuclear Science, Vol. 36, No. 1,751-755 (1989).

Breidenbach, M. and the SLD Collaboration, “A Status Report on the SLD Data Acquisition System,” Invited paper at the 1988 Nuclear Science Symposium. IEEE Trans. on Nuclear Science, Vol. 36, No. 1 23-28 (1989).

Cork, C., J. Fox, and R. Melen, “A Networked Real-Time Control System for the Stanford Photon Research Laboratory,” Proc. IEEE Particle Accelerator Conference, Vol. 2, 716-718 (1987).

Fox, J. D., B. T. Khuri-Yakub, and G. S. Kino, “An Acoustic Resonator Transducer for Operation in Air,” Elect. Lett 21 (16), 694-696 (1 August 1985).

Fox, J. D., G. S. Kino, and B. T. Khuri-Yakub, “Acoustic Microscopy in Air at 2 MHz,” Appl. Phys. Lett. 47 (5), 465-467 (1 September 1985).

Fox, J. D., B. T. Khuri-Yakub, and G. S. Kino, “Excitation and Detection of 8.4 MHz Acoustic Waves in Air,” Published in 1984 Ultrasonics Symposium Proceedings, Vol. 1, IEEE Catalog No. 84CH2112-1SU, Ed: B. R. McAvoy, 475-479 (Institute of Electrical & Electronics Engineers, Inc., New York, 1984).

Fox, J. D., B. T. Khuri-Yakub, and G. S. Kino, “High-Frequency Acoustic Wave Measurements in Air,” Published in 1983 Ultrasonics Symposium Proceedings, Vol. 1, IEEE Catalog No. 83CH1947-1SU, Ed: B. R. McAvoy, 581 (Institute of Electrical & Electronics Engineers, Inc., New York, 1983).

Fox, J. D. and H. Schwarz, “Phase and Amplitude Detection System for the Stanford Linear Accelerator,” IEEE Trans. on Nuclear Science NS-30 (4), 2264-2266 (1983).

Fox, J. D., E. Linstadt, and R. Melen, “Applications of Local Area Networks to Accelerator Control Systems at the Stanford Linear Accelerator,” IEEE Trans. on Nuclear Science NS-30 (4), 2317-2319 (1983).

Fox, J. D. and H. Schwarz, “A Microprocessor-Controlled Phase Detection System for 2856 MHz Pulses,” IEEE Microwave Theory and Techniques Digest, ISSN 0149-645X, 334-336 (1982).

Fox, J. D. and M. E. B. Franklin, “A Luminosity Monitor at PEP,” IEEE Trans. on Nuclear Science NS-28 (3), 2210-2213 (1981).

Fox, J. D. and J. L. Pellegrin, “Beam-Derived Trigger System for Multibunch Time-of-Flight Measurement,” PEP Note 329, Stanford Linear Accelerator Center (1981).

PEP I&C Group and PEP Theory Group, “The PEP Computer and Control System,” IEEE Trans. on Nuclear Science NS-20, 3268-3271 (1979).