PUBLICATIONS

APL staff members were authors or coauthors of the following unclassified books and technical articles that were recently published:

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PRESENTATIONS

APL staff members were among those who gave the following unclassified presentations:

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Biermann PJ, Cranmer JH, Lebowitz C (Carderock Div., NSWC), Brown L (Carderock Div., NSWC), and Veronesi W (United Technologies Research Center)
Ultrasonic end-of-cure sensor for autoclave cured, graphite epoxy composites, *American Society for Nondestructive Evaluation Spring Conf., Fifth Annual Research Symp.*, Norfolk, VA (18–22 Mar 1996).

Chin DC
Optimal sensor locations: Discussion, *Washington Statistical Society Seminar*, Washington, DC (11 Dec 1995).

Cutchis PN, Antosh L, and North R
Quantitative comparison of spinal cord stimulation electrode configurations, *International Neuromodulation Soc., Third International Congress, American Neuromodulation Society First Scientific Meeting*, Orlando, FL (6–10 Mar 1996).

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Patient-interactive neurological stimulation system, *International Neuromodulation Soc., Third International Congress, American Neuromodulation Society First Scientific Meeting*, Orlando, FL (6–10 Mar 1996).

Clatterbaugh GV, and Charles HK, Jr
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The Russian/US active geophysical rocket experiment (AGRE), *COSPAR Colloquium*, Beijing, China (15–19 Apr 1996).

Feldmesser HS, and Winters ME
The effects of vapor phase reflow on the strength of the bond between laminated heat sinks and printed wiring boards, *IPL PL Expo '96*, San Jose, CA (6 Mar 1996).

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New sources of entangled particles, *International Centre for Theoretical Physics Quantum Interferometry Conf.*, Trieste, Italy (9 Mar 1996).

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Gotwols BL, Thompson DR, and Chapman RD
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Graber HC, Haus BK, and Thompson DR
Measurements of ocean waves and marine surface winds using high-frequency Doppler radar, *National Radio Science Meeting*, Boulder, CO (11 Jan 1996).

Hill SD, and Fu MC (Univ. of MD)
Transfer optimization via simultaneous perturbation stochastic approximation, *Society for Computer Simulation 1995 Winter Simulation Conf.*, Arlington, VA (3–6 Dec 1995).

Ku HC, and Sibeck DG
Signatures of bursty merging at a single X-line, Physics Dept., Univ. of MD, College Park, MD (14 Feb 1996).

Kusnierkiewicz DY, Carlsson PU, and Temkin DK
Considerations for the procurement and application of hybrid DC/DC converters, *34th Aerospace Sciences Meeting and Exhibit*, Reno, NV (15–18 Jan 1996).

Le BQ
Light-weight laser range finder packaging design, *2nd IAA International Conf. on Low-Cost Planetary Missions*, JHU/APL, Laurel, MD (16–19 Apr 1996).

Lee LH (JHU), Cowan OO (JHU), Fainchtein R, Bohandy J, Geiser U (ANL), Wang HH (ANL), Schlueter JA (ANL), Kushch NC (ANL), Flynn JP (ANL), Vanzile ML (ANL), and Williams JM (ANL)
Discovery of superconductivity on K-(BEDT-TTF)$_2$-Cu[N(CN)$_2$]I, *March Meeting of the American Physical Soc.*, St. Louis, MO (18–22 Mar 1996).

Lee SC, and Santo AG
Near Earth Asteroid Rendezvous (NEAR) spacecraft safing design, *2nd IAA International Conf. on Low-Cost Planetary Missions*, JHU/APL, Laurel, MD (16–19 Apr 1996).

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Creating a continuous learning organization, *IFMA National Research Committee Best Practices Forum*, Charlotte, NC (26–27 Feb 1996).

Paranicas CP
Saturn: Satellite and ring microsignatures, NASA/GSFC, Greenbelt, MD (15 Mar 1996).

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Microsignatures in satellite orbits, *Cassini Ring Hazard Workshop*, NASA–Ames, Mountain View, CA (25 Jan 1996).

Unified model of particle diffusion in inner magnetosphere, *Cassini Ring Hazard Workshop*, NASA–Ames, Mountain View, CA (25 Jan 1996).

Raney RK
A down-looking satellite SAR with on-board real-rate processing: The delay/Doppler radar altimeter, *EUSAR '96*, Konigswinter, Germany (26–28 Mar 1996).

Advanced radar altimeter concepts, U.S. Navy, SPAWAR, Crystal City, VA (30 Jan 1996).

POES companion, *Seminar for the EOS PM-1 Program Office*, NASA/GSFC, Greenbelt, MD (14 Mar 1996).

The Magellan imaging radar mission to Venus, *IEEE Atlanta Chapter Meeting*, Atlanta, GA (16 Jan 1996).

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Santo AG, Lee SC, and Cheng AF
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Bursty merging at the dayside magnetopause, Charles Univ., Prague, Czech Republic (28 Feb 1996).

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Evaluation of an adaptive traffic control technique with underlying system changes, *Society for Computer Simulation 1995 Winter Simulation Conf.*, Arlington, VA (3–6 Dec 1995).

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Stochastic version of second-order (Newton-Raphson) optimization using only function measurements, *Society for Computer Simulation 1995 Winter Simulation Conf.*, Arlington, VA (3–6 Dec 1995).

The Kantorovich inequality for error analysis of the Kalman filter with unknown noise distributions, *IEEE Conf. on Decision and Control*, New Orleans, LA (13–15 Dec 1995).

Uncertainty bounds for parameter identification with small sample sizes, *IEEE Conf. on Decision and Control*, New Orleans, LA (13–15 Dec 1995).

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Model-free control of nonlinear stochastic systems in discrete time, *IEEE Conf. on Decision and Control*, New Orleans, LA (13–15 Dec 1995).

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Effect of chloride ion adsorption on the kinetics of cathodic current on steel, *Corrosion/96*, Denver, CO (24–29 Mar 1996).

Srinivasan R, Gopalan P (JHU), Zarriello R, Myles-Tochko CJ, Meyer JH, and Teagle DE
Design, optimization, and management of cathodic protection of rebars in bridges, *Structural Materials Technology, NDE Conf.*, San Diego, CA (20–23 Feb 1996).

Swartz WH
Radiative flux, ozone, nitrogen dioxide, *TARFOX Planning Meeting*, Wallops Island, VA (19 Mar 1996).

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Contamination experiments in the Midcourse Space Experiment, *AIAA 34th Aerospace Sciences Meeting and Exhibit*, Washington, DC (15–18 Jan 1996).

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PISCES-precision integrated strike concept evaluation suite, *17th Interservice/Industry Training Systems and Education Conf.*, Albuquerque, NM (13–16 Nov 1995).

Wood BE (AEDC/CALSPAN), Seiber BL (AEDC/CALSPAN), Bertrand WT (AEDC/CALSPAN), and Uy OM
Effects of thin cryo-contaminant films on Midcourse Space Experiment (MSX) satellite cryo-optics, *16th Aerospace Testing Seminar*, Manhattan Beach, CA (12–14 Mar 1996).

Yanek SP, Pisacane VL, Sumapraja S (Indonesian Ministry of Research), Stewart RL, and Champion JR
Momcare: A feasible telemedicine system for maternal care, *XVth Asian and Oceanic Congress of Obstetrics and Gynecology*, Bali, Indonesia (13–14 Oct 1995).

Zanetti LJ
Planetary MAGSATS, *Mission to the Solar System Workshop*, Cal Tech, Pasadena, CA (4–6 Mar 1996).

COLLOQUIA

The following topics were recently presented at the weekly APL colloquium:

1 Mar
Smart Molecular Detectors for Biological Research, RJ Cotter, Dept. of Pharmacology and Molecular Science, JHU

8 Mar
Superspace: Can You Really Get There from Here? SJ Gates, Jr, Dept. of Physics, Univ. of Maryland, College Park

15 Mar
Fast Algorithms for Wavelet Transforms, M Unser, National Institutes of Health

22 Mar
The Earth's Early Evolution, SA Bowring, Massachusetts Institute of Technology

29 Mar
Global Warming, RS Lindzen, Massachusetts Institute of Technology

12 Apr
Designer Drugs for Healthier Living, GH Posner, Dept. of Chemistry, JHU

19 Apr
Safe and Clean Energy from the Moon, GL Kulcinski, Univ. of Wisconsin

26 Apr
Lipid Tubules: Formation, Characterization, and Applications, JM Schnur, Naval Research Laboratory

3 May
Refractive Surgery, DT Azar, Wilmer Eye Institute, JHU

10 May
Polymeric Delivery Systems for Drug Delivery and Tissue Engineering, RS Langer, Jr, Massachusetts Institute of Technology

17 May
A New Perspective on the Solar Neutrino Problem, R McNutt, APL