

## PUBLICATIONS

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

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## PRESENTATIONS

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- Benson RC, Phillips TE, Silver DM, Boies MT, Uy OM, and Galica GE  
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Modernization of the DSCS operations centers—Beyond BPR, *1997 Software Technology Conf.*, Salt Lake City, UT (27 Apr–2 May 1997).
- Simon I (JHH Dept. of Urology), Christens-Barry WA, Pound CR (JHH Dept. of Urology), and Partin AW (JHH Dept. of Urology)  
An automated image analysis system provides an improved method for cell motility measurements to assess metastatic potential of prostate cancer, *Mid-Atlantic Conf. of the American Urological Association*, Hot Springs, VA (28 Sep–1 Oct 1997).
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Design of an electronically tunable microwave impedance transformer, *The Advanced CAD Methodologies Session of the IEEE Int. Microwave Symp.*, Denver, CO (11 Jun 1997).
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Demonstration of the "ring of fire" in fleet battle experiment—Alfa, *Precision Strike Technology Symp.*, JHU/APL, Laurel, MD (9 Oct 1997).
- Thews ER, Skrivseth KA, Roulette JF, Dockery GD, Hanson JP, Smoot JJ, Hardy T (PEO(TAO)SEA), Cantrell BH (NRL), Lin CT (NRL), Kolb K (NSWC), Eidson J (MIT), Soltyka A (TSC), and Costa J (Logicom Syscom)  
A study of US Navy radars' performance in the near-shore environment, *43rd Annual Tri-Service Radar Symp.*, Boulder, CO (24–26 Jun 1997).
- Uy OM, Boies MT, Phillips TE, Erlandson RE, Silver DM, Wood BE (Sverdrup Tech/AEDC), Benson RC, Lesho JC, Green BD (PSI), Galica GE (PSI), Dyer JS (USU/SDL), and Hall DF (Aerospace)  
Measurement of the polar auroral regions with the MSX cold cathode pressure sensor, *SPIE*, San Diego, CA (28 Jul–1 Aug 1997).
- Wing S, and Newell PT  
Central plasma sheet properties as inferred from ionosphere observations, *Geospace Environment Modeling Workshops*, Snowmass, CO (16–20 Jun 1997).
- Wood BE (Sverdrup Tech/AEDC), Hall DF (Aerospace), Lesho JC, Uy OM, Boies MT, Silver DM, Benson RC, Dyer JS (USU/SDL), Galica GE (PSI), Green BD (PSI), and Bertrand WT (AEDC)  
QCM flight measurements of contaminant films and their effect on Midcourse Space Experiment (MSX) satellite optics, *SPIE*, San Diego, CA (28 Jul–1 Aug 1997).

The following papers were presented at the American Geophysical Union Spring Meeting, Baltimore, MD (27–30 May 1997):

Benson RC, Phillips TE, Boies MT, Uy OM, Leary JC, and Keating GM

Atmospheric helium density measurements at 900 km from the neutral mass spectrometer on MSX.

Christon SP, Eastman TE, Williams DJ, McEntire RW, Roelof EC, Lui ATY, Sotirelis T, Nylund SR, Gloeckler G, Frank LA, Paterson WR, Kokubun S, Matsumoto H, Kojima H, Mukai T, Saito Y, and Yamamoto T

Statistics of the spatial distribution and geomagnetic activity dependence of magnetospheric plasma regimes.

DeMajistre R

Combined spatial and spectral retrieval techniques for use with stellar occultation data.

Eastman TE, Roelof EC, McEntire RW, Lui ATY, Williams DJ, and Christon SP

Geotail/EPIC survey of energetic proton anisotropy in the Earth's magnetotail.

Kupperman DG, Paxton LJ, Yee JH, DeMajistre R, Romick GJ, Carbary JF, Swaminathan PK, Morrison D, Morgan MF, Anderson DE, Meng CI, and Kumar CK

Ozone and molecular densities retrieved with multispectral stellar occultation observations.

Lagg AD, Williams DJ, Roelof EC, McEntire RW, Krimigis SM, Armstrong TP, Lanzerotti LJ, Fritz TA, Roederer JG, Krupp N, and Wilken B

Charge exchange processes in the Io plasma torus: Possible explanation for depletion of energetic sulfur ions at high pitch angles observed with the energetic particles detector on board the Galileo spacecraft.

Mauk BH, Williams DJ, McEntire RW, Roelof EC, Krimigis SM, Armstrong TP, Wilken B, Roederer JG, Fritz TA, and Lanzerotti LJ

Hot plasma parameters of Jupiter's middle magnetosphere as derived from Galileo EPD measurements.

McEntire RW, Williams DJ, Mauk BH, Roelof EC, Krimigis SM, Armstrong TP, Wilken B, Roederer JG, Fritz TA, and Lanzerotti LJ

Observations of energetic particle flux variations during Europa encounters by the Galileo energetic particles detector (EPD).

Yee JH, Carbary JF, Morgan MF, Romick GJ, Kupperman DG, McEvaddy PJ, Morrison D, Anderson DE, Paxton LJ, Meng CI, and Kumar CK

Studies of atmospheric structure by MSX UVISI instrument.

The following papers were presented at the RIPE XXI Annual Conf., JHU/APL, Laurel, MD (23 Oct 1997):

Crum LH

Educational outreach.

Drake GR

Human resources training and development and technical publications.

Good RM

Paperless resources for on-line editing.

Gresehover RS, and Halbrook LP

Collaboration across boundaries for Intranet development and maintenance.

Nelson SE

The redesign of the JHU/APL home page.

Peck A

Marketing your services within your organization.

Peck A, and Winters PD

Publication work teams—Teams that have impact.

Suther MB, and Talbott BJ

Computer systems services and technical publications.

## COLLOQUIA

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

3 Oct

*Tiny-TOF Mass Spectrometer for Biosensing*, WA Bryden, APL

10 Oct

*Solar Corona and Solar Wind: A New View*, K Dere, Naval Research Laboratory

17 Oct

*Brownian Motion and Biomolecular Motors*, RD Astumian, University of Chicago

24 Oct

*Safety of Automobile Passengers: Biomechanical Testing and Analysis*, M Kleinberger, National Highway Traffic Safety Administration

31 Oct

*The Enigma of Efficiency*, R Kanigel, author

7 Nov

*Microelectromechanical Systems (MEMS): Past Successes and Future Challenges*, SD Senturia, MIT