PUBLICATIONS

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


- Anderson BJ, and Acuña MH

- Elfhaim T, Guignard S, and Thompson DR

- Firebaugh SL, Charles HK Jr, Edwards RL, Keeney AC, and Wilderson SF

- Frey HU, Ostgaard N, Imml TJ, Korth H, and Mende SB
  - Seasonal dependence of localized, high-latitude dayside aurora (HiLDA), J. Geophys. Res. 109, A04303 (2004).

  - Determination of the properties of Mercury’s magnetic field by the MESSENGER mission, Planet. Space Sci. 52(8), 733–746 (2004).

- Lario D, Livi S, Roelof EC, Decker RB, Krimigis SM, and Solomon SC
  - Heliospheric energetic particle observations by the Cassini spacecraft: Correlation with 1 AU observations, J. Geophys. Res. 109, A09310 (2004).

- Mack SA, and Schoeberlein HC

- Moe J, Okasavik K, and Carlson HC


- Rust D, and Roundhill D

- Saur J, Mauk BH, Kafnner A, and Neubauer FM

- Spall JC

- Spudis PD

- Ukhorskiy AY, Sitnov MI, Sharma AS, and Papadopoulos K


- Zhang Y, Paxton LJ, Meng C-I, Morrison D, Wolven B, Kil H, and Christensen AB

CONFERENCES WITH PROCEEDINGS

APL staff members were among those who gave the following presentations that appeared in conference proceedings:

- Avila RD

- Beasley MA, Firebaugh SL, Edwards RL, Keeney AC, and Osandi R

- Beasley MA, Firebaugh SL, Edwards RL, Keeney AC, and Osandi R

- Cybyk BZ, Wilkerson JT, and Grossman KR

- Dobey VT, and Earich PL

- Fitch MJ, Schaudi D, Kelly CA, and Osandi R

- Florio EN, Magruder SF, Happel-Lewis SL, and Wojcik RA

- Hildebrandt WA, Katz B, and Lin JJ

- Jablon AR, and Agrawal AK

- Marshall RE, Burgess EH III, and Rottier JR

- Mayfield JC, and McNamee JB

- McGrath BE, Frostbutter DA, Parthasarathy KN, Heyler GA, and Chang Y

Mount DM, Netanyahu NS, Piatko C, Silverman R, and Wu AY

Newhall BK, Jenkins JW, and Dietz JE

Rottier JR, Marshall RE, and Burgess EH III

Sample JL, Rebello KJ, Saffarian H, and Osander R


The following papers appeared in conference proceedings available on CD-ROM:

Boone BG, Bruzz Jr, Kluga BE, Rogala EW, Chen PC, and Hale RD

Burbank JL, Conklin RE Jr, Kasch WT, and Nichols RA

Fowler KR

Fowler KR, and Land HB
System design that minimizes both missed detections and false alarms: A case study in arc fault detection, Proc. IMTC/04 Conf., 4309, Lake Como, Italy (May 2004).

Kasch WT, and Burbank JL

Newhall BK, Jenkins JW, and Dietz JEG

Robinette EJ, Palme GR, and Wienhold PD
Toughening of epoxy-amine resin systems for VARTM and filament winding applications, SAMPE 2004 ISSE, Long Beach, CA (May 2004).

Silberberg D, Frank P, Immer E, Hider R, and Bethes W

Wiethold PD, Fasold MJ, and Schaefer ED
The development of a light baffle assembly for the CRISM instrument, SAMPE 2004 ISSE, Long Beach, CA (May 2004).

PRESENTATIONS

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

Agrawal A, Frank J, White J, and Richards J
Impact of TR module power on the attributes of active phased array radars, Tri-Service Radar Symp., Albuquerque, NM (Jun 2004).

Recent science results from the Iridium constellation magnetometers, Dartmouth Space Sci. Seminar, Dartmouth College, Hanover, NH (Jun 2004).

Biermann PJ, Ward EE, Cain RP, Carkhuff BG, Merkle AC, and Roberts JC

Beasley MA, Firebaugh SL, Edwards RL, Keeney AC, and Osander R
Design and packaging for a microelectromechanical thermal switch radiator, IThERM 2004, Las Vegas, NV (Jun 2004).

Dunham D
Exploring the cosmos by doing something different, Am. Astronaut. Soc. (AAS) Brouwer Award Lecture, Laurel, MD (May 2004).

Dunham D

Dunham D
Occultation workshop, Riverside Telescope Makers Conf., Camp Oakes, CA (May 2004).

Firebaugh SL, Charles HK Jr, Edwards RL, Keeney AC, and Wilderson SF

Lithial S-band cluster measurements on USS Lake Champlain CG 57, Tri-Service Radar Symp., Albuquerque, NM (Jun 2004).

Franz JS

Haggerty DK
The high radiation anisotropy composition and electron spectrometer, GEANT4 Space Users Workshop, Nashville, TN (May 2004).

Haggerty DK, Ho GC, Roelof EC, and Gold RE
Inter-calibration of ACE/EPAM from different detector heads: Implications for NOAA RTSW users, NOAA, Space Weather Week, Boulder, CO (Apr 2004).

Ho GC, Donegan MM, and Vandegriff J

Hori T, Lui AY, Ohtani S, Brandt PC, McIntire RW, Maezawa K, Mukai T, Kusaka Y, and Hayakawa H
Jablonski DG, Long MA, and Baker R

Kelly M, and McEvaddy PJ

Kil H, Paxton LJ, Su SY, Zhang Y, and Yeh CH
Origin of the large equatorial plasma density depletions during storm time, Cedar Workshop, Santa Fe, NM (Jun 2004).

Kil H, Paxton LJ, Su SY, Zhang Y, and Pi X
Onset condition of the negative storm, Cedar Workshop, Santa Fe, NM (Jun 2004).

Korth H
Signals from the termination shock: Recent Voyager observations, First General Assembly of the European GeoScis. Union, Nice, France (Apr 2004).

Lario D, Livio S, Krimigis SM, McKibben RB, Macelennan CG, Reisenfeld DB, de Koning C, Russell CT, and Dougherty MK
Heliospheric energetic particle observations during the October-November 2003 superstorm event, First General Assembly of the European GeoScis. Union, Nice, France (Apr 2004).

Lea DJ, Haine TW, and Gasparovic RF
Controllability and observability of the meridional overturning circulation in the Irminger Sea, Colloquium on Marine Environmental Monitoring and Prediction, Liege, Belgium (May 2004).

Lea DJ, Haine TW, and Gasparovic RF

Liang J
Linking substorm current system to a thin current sheet in the Earth’s magnetotail, Thin Current Sheet Workshop, College Park, MD (Apr 2004).

Ohtani S-I

Rebello KJ, and Darrin A

Rebello KJ, Sample JL, Saffarian H, and Osiander R
Carbon nanotube coatings for thermal control, IThERM 2004- 9th Intersoc. Conf. on Thermal and Thermomechanical Phenomena in Electrical Systems, Las Vegas, NV (Jun 2004).

Swartz WH, Kelly MA, and Lloyd SA
The detectability of polar stratospheric clouds and potential impact on target acquisition, Commanders Quarterly Tech. Seminar, HQ Air Force Weather Agency, Offutt AFB, Bellevue, NE (Feb 2004).

Intercomparison of MSX/UVISI-derived ozone and temperature profiles with ground-based, SAGE II, HALOE, and POAM III Data, Quadrennial Ozone Symp., Kos, Greece (Jun 2004).

Weiss MB, Morrison DD, Hashemian MR, and Paxton LJ
Space physics metadata searching using space physics data markup language (SPDMML), Coupling Energetics and Dynamics of Atmosphere Regions (CEDAR) Conf., Santa Fe, NM (Jun 2004).

Wesolek DM, Moran M, Rebello KJ, Berhane B, Osiander R, and Darrin AM

White DM
Chemical-biological defense and emergency response, Assoc. for the Advancement of Medical Instrumentation, Boston, MA (Jun 2004).

Wickenden DK

Yee J-H, Swartz WH, Shetter RE, Hall SR, Lefer BL, Brouell EV, and Avery MA

Column composition retrieved from direct solar irradiance measurements during SOLVE II, Quadrennial Ozone Symp., Kos, Greece (Jun 2004).

The following papers were presented at the National Sci. Foundation Geospace Environment Modeling (GEM) Workshop, Snowmass, CO (Jun 2004):

Korth H
High latitude pointing flux observations by the Iridium constellation during northward IMF conditions.

Ohtani S-I, Brandt PC, and Mitchell DG
ENA flux variations during storm-time substorms: A superpose epoch analysis of IMAGE/HENA data.

Ohtani S-I, Ueno G, Higuchi T, and Kawano H
Annual and semiannual variations of the location and intensity of large-scale field-aligned currents.

Ukhorskiy AY
The impact of ULF waves on the outer radiation belt electrons.

Ukhorskiy AY, Sitnov MI, Sharma AS, Anderson BJ, Ohtani S, and Lui ATY
Data-derived forecasting model for relativistic electron intensity at geosynchronous orbit.

Wing S, Fujimoto M, Newell PT, and Meng C-I
Plasma sheet for northward IMF.

Wing S, Newell PT, and Meng C-I
Double cusp.

The following topics were presented at the weekly APL Colloquium in 2004:

15 July
X-43A—The First Flight of a Scramjet Powered Airplane, G Coppening, NASA Dryden Flight Research Center

17 Sept
Science and the Vision for Space Exploration, O Figueroa, NASA Headquarters Science Mission Directorate