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Channok C, Ruffolo D, Desai MI, and Mason GM
Finite time shock acceleration and fits to ESP ion spectra.

Király P, Axford WI, Daibog EI, Heber B, Kallenbach R, Kecskeméty K, Mason GM, Logachev YI, Mewaldt RA, Posner A, Rodríguez-Pacheco J, Treumann R, and Zeldovich MA
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Miyasaka H, Stone EC, Mewaldt RA, Mason GM, Haggerty DK, Nagata K, Kikuchi J, Doke T, Hasebe N, Maezawa K, Takashima T, Ihara A, and Matsuoka A
ACE/NOZOMI multispacecraft observations of solar energetic particles.

Wiedenbeck ME, Mason GM, Cohen CMS, Cummings AC, Dwyer JR, Gold RE, Krimigis SM, Leske RA, Mazur JE, Mewaldt RA, Stone EC, and von Rosenvinge TT
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The following presentations appeared in conference proceedings at *Proc. 4th Annu. Inst. of Geophysics and Planet. Phys., Int. Astrophysics Conf.*, Palm Springs, FL (Aug 2005):

Lario D, Decker RB, Ho GC, Hu Q, Smith CW, Desai MI, and Vinas A-F
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Mason GM, Desai MI, Mazur JE, and Dwyer JR
Energetic particles accelerated by shocks in the heliosphere: What is the source material? The physics of collisionless shocks, pp. 219–226.

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The following presentations appeared in conference proceedings at *Proc. 2005 NASA Symp. on VLSI*, Coeur d'Alene, ID (Oct 2005):

Fraeman ME, Meitzler RC, Martin MN, Millard WP, Wong YL, Mellert J, Bowles-Martinez JN, Strohbehn K, and Roth DR
Radiation tolerant mixed signal microcontroller for Martian surface applications.

Martin MN, Schwartz P, Le B, and Frankford D
Rad-hard power conditioning control ASICs for ULP applications.

Martin MN, Strohbehn K, Millard WP, Meitzler RC, Fraeman ME, and Jaskulek SE
Power remote input output ASIC (PRIO).

Wong YK, Martin MN, Meitzler RC, and Fraeman ME
Radiation hard by design techniques for EEPROM.

COLLOQUIA

The following topics were presented at the weekly APL Colloquium in 2005:

30 Sep
Hispanic Heritage Month Lecture, VADM R Carmona, M.D., U.S. Surgeon General

7 Oct
Science and Technology: Why Should We Care? JC Sommerer, JHU/APL

14 Oct
Responding to Weapons of Mass Destruction Incidents and Natural Disasters, T Voltaggio, U.S. Environmental Protection Agency

21 Oct
Scientific Exuberance, K Jamison, JHU School of Medicine

28 Oct
Pakistan: Between Mosque, Military and Nuclear Weapons, Ambassador H Haqqani, Carnegie Endowment for Intl. Peace

2 Nov
Warfighting in the Twenty-First Century, T Barnett, Author & Strategic Planner

18 Nov
Deep Impact and Comet 9P/Tempel 1: From Evolved Surface to Interior Primeval Dust, CM Lisse, JHU/APL

2 Dec
Physics and Applications of Negatively Refracting Electromagnetic Materials, SM Anlage, Univ. of Maryland, College Park

9 Dec
Who Wrote this Document? C Nicholas, Univ. of Maryland, Baltimore County

16 Dec
A Lifetime of BAD Photographs, BA Dale, Nat. Geographic Society

The following topics were presented at the weekly APL Colloquium in 2006:

6 Jan
Speed as a Critical Issue for the USAF, M Lewis, USAF

13 Jan
R&D Needs for Effective Blast, Shock, and Impact Mitigation, T Krauthammer, Penn State Univ.

20 Jan
The Future of the UTC Time Scale, R Beard, NRL

27 Jan
Robot Precursor Missions for a Human Return to the Moon, P Spudis, JHU/APL

3 Feb
A Systems Approach to Modeling & Analyzing Biological Systems, F Doyle, Univ. of CA, Santa Barbara

17 Feb
Breakthrough Technologies that Enable Space Exploration, W Whitlow, Jr., NASA Glenn Res. Center

10 Mar
A Sheriff's View of Homeland Security, Sheriff T Kamatchus, Marshall County, Iowa

17 Mar
Why Great Leaders Don't Take Yes for an Answer: Managing for Conflict and Consensus, M. Roberto, New York Univ., Stern School of Business

24 Mar
The Assassin's Mace: A Worst Case Scenario for the New American Century, BG V Corpus, Armed Forces of the Philippines

31 Mar
The Science of Cocoa and Chocolate: What Do Migratory Birds and Nitric Oxide Synthesis Have in Common? H Schmitz, Mars, Inc.

12 Apr
Sleep, Fatigue and Stress: Monitoring Human Behavioral Capability, DF Dinges, Univ. of Pennsylvania

21 Apr
New Eyes on the Universe: Observing Beyond Hubble with NASA's Other Space Telescopes, K Weaver, NASA Goddard

26 Apr
Revolutionizing Prosthetics, G Ling, DARPA

5 May
The Arab Struggle for Democracy in the Middle East, B. Rubin, Global Research in International Affairs Center

12 May
The Wars in Afghanistan and Iraq: A Junior Officer's Perspective on What We've Learned and Where We're Going, N Fick, Former Captain, USMC

19 May
Faces of the Tsunami, RADM WJ McDaniel, USN (ret)

24 May
Ethics of the Long War, C Coker, London School of Economics

11 Oct
Hispanic Heritage Month Colloquium, AE Cabral, U.S. Treasurer

20 Oct
The Chief of Naval Operations Strategic Studies Group: Science Advisor's Perspective, R Wilcox, JHU/APL