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PRESENTATIONS

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- Fox, H. G., and Wilkinson, W. O., "Computer Aided Thermal Test System," and "West Chamber Cryopump System Upgrade Project," 33rd Meeting, AIAA Working Group on Space Simulation, Ottawa, Canada (Sep 22-25, 1986).
- Hart, E. F., "The Easy Road to the Hard Disk," SHARE 66, Anaheim (Mar 16-24, 1986).
- Hawley, P. A., and Stevens, T. R., "Two Sets of Benchmark Problems for CACSD Packages," IEEE 3rd Symp. on Computer-Aided Control System Design, Arlington, Va. (Sep 24-26, 1986).
- Kemelhor, R. E., "Relationship Between Primes and Subcontractors Relative to Personnel Skills and Production Costs," Meeting on Computer Integrated Manufacturing Technology, Los Angeles (Mar 25, 1987).
- Kim, B. F., Bohandy, J., and Adrian, F. J., "Demonstration of the LIFT Process Using a YAG Laser," American Physical Society Meeting, New York (Mar 1987).
- Ko, H. W., "Non-Standard Atmospheric Effects on Microwave Systems," Boston IEEE/AES Society Lecture, Sudbury, Mass. (Jan 21, 1987).
- Krimigis, S. M., "Hot Plasma and Radiation Environment of Uranus," Second Neil Brice Memorial Symp., University of Iowa, Iowa City (Sep 1-5, 1986).
- Krimigis, S. M., "Measurements of Energetic Ions and Electrons by the Voyager Spacecraft Upstream of the Bow Shocks of Earth, Jupiter, Saturn, and Uranus," Int. Symp. on Space Physics, Beijing (Nov 10-14, 1986).
- Krimigis, S. M., "The Recent Exploration of Uranus by the Voyager 2 Spacecraft," Seminar, American University, Washington, D.C. (Mar 14, 1986).
- Kunski, R., "Integral Cavity Hydrogen Maser," 18th Annual Precise Time and Time Interval Applications and Planning Meeting, Washington, D.C. (Dec 2-4, 1986).
- Mark, F. F., Deters, O. J., Barger, C. B., and Friedman, M. H., "Effect of Flow Partition on Wall Shear in a Cast of a Human Coronary Artery," ASME Winter Annual Meeting, Anaheim (Dec 7-12, 1986).
- Rust, D. M., "The Structure of X-Ray Flares," Phobos Science Symp. - Solar and Space Plasmas, Moscow (Mar 26-29, 1987).
- Stewart, R. L., and Hamill, B. W., "An Experimental Interview System for Multiple Interacting Decision Makers," 9th MIT/ONR Workshop on C³ Systems, Monterey (Jun 1986).
- Talbott, R. R., "Fiber Optics Update: Justifications for Shipboard Use," American Society of Naval Engineers, JHU/APL, Laurel, Md. (Oct 15, 1986).
- Uy, O. M., and Maurer, R. H., "Fault Tree Safety Analysis of a Large Li/SOCl₂ Spacecraft Battery," NASA/Goddard Space Flight Center Battery Workshop, Greenbelt (Nov 18-19, 1986).
- Vasholz, D. P., "Random Sheets, Random Strings, and Oceanic Dye Dispersion," 3rd Int. Symp. on Stratified Flows, Pasadena (Feb 3-5, 1987).
- Wagner, G. D., "Microelectronics Applied to Medical Devices," Government Microcircuit Applications Conf., San Diego (Nov 11-13, 1986).
- The following papers were presented at the 8th FORTH Conf., Asilomar, Calif. (Nov 28-30, 1986):
- Fraeman, M. E., Hayes, J. R., Williams, R. L., and Zaremba, T., "A 32 Bit Processor Architecture for Direct Execution of FORTH";
- Hayes, J. R., "An Interpreter and Object Code Optimizer for a 32 Bit FORTH Chip";
- Williams, R. L., Fraeman, M. E., Hayes, J. R., and Zaremba, T., "The Development of a VLSI FORTH Microprocessor."
- The following papers were presented at the Workshop on Microelectronic Materials, Analysis, and Reliability, JHU/APL, Laurel, Md. (Nov 18-19, 1986):
- Barger, C. B., "Electron and Ion Probes for Materials Analysis";
- Benson, R., "Photon Probes for Materials Analysis";
- Benson, R., and Phillips, T., "Organic Adhesives";
- Brantley, R. D., "Parts Screening";
- Charles, H. K., Jr., "Hybrid Microcircuit Manufacturability and Reliability: A Materials Overview";
- Maurer, R. H., "Statistics/Quality Control";
- Murphy, J., "Thermal Wave Imaging Methods";
- Phillips, T., "Analytical Methods for Bulk Analysis";
- Romenesko, B. M., "Microelectronics Processing: Applications of Materials Analysis";
- Uy, O. M., "Failure Analysis";
- Wagner, G. D., "Microelectronic Design Considerations";
- Weiner, J. A., "Materials Analysis and Reliability: Test and Screening Procedures for Material in Microelectronics."
- The following papers were presented at the 1986 Fall Meeting, American Society for Limnology and Oceanography, San Francisco (Dec 8-12, 1986):
- Brandt, A., Sarabun, C. C., and Dubbel, D. C., "Supertidal Processes in the Chesapeake Bay: An Overview of the JHU/APL Program";
- Dubbel, D. C., Sarabun, C. C., and Brandt, A., "A Statistical Characterization of Critical Richardson Number Regions in the Chesapeake Bay";
- Sarabun, C. C., Dubbel, D. C., and Brandt, A., "Measurements of Internal Wave Speed and Direction in the Chesapeake Bay."
- The following papers were presented at the 1986 Fall Meeting, American Geophysical Union, San Francisco (Dec 7-12, 1986):
- Keath, E. P., Krimigis, S. M., McEntire, R. W., and Sibeck, D. G., "Magnetospheric Particle Injection and the Upstream Ion Event of September 5, 1984";
- Krimigis, S. M., Sibeck, D. G., McEntire, R. W., Zanetti, L. J., and Baker, D. N., "Multip spacecraft Observations of Magnetospheric and Upstream Ion Enhancements Associated with the Substorm Injection Events of November 1, 1984";
- Mack, S. A., "Source Mechanisms and Characteristics of Ocean Microstructure";
- Ondercin, D. G., and Fuehchel, P. G., "Bio-Optical Measurements in the Sargasso Sea."

COLLOQUIA

- Nov 14, 1986—"Colloidal Crystals and Liquids: Phase Diagrams and Dynamics," M. O. Robbins, The Johns Hopkins University.
- Nov 21—"Dark Matter in the Universe," V. C. Rubin, Carnegie Institution.
- Dec 5—"Antarctica - A Continent for Science," J. R. Dudeney, British Antarctic Survey.
- Dec 12—"The Programmable Implantable Medication System: Hi-Tech Medicine," R. E. Fischell, APL.
- Jan 9, 1987—"Processing Signals and Symbols with Neural Network Models," T. J. Sejnowski, The Johns Hopkins University.
- Jan 16—"Adventures of a Physics Reporter," G. B. Lubkin, *Physics Today*.
- Jan 23—"An Overview of Optical Disc Technology," J. B. Freedman, National Bureau of Standards.
- Jan 30—"From Micro to Macro: Reflections on Schroedinger's Cat," J. Bub, University of Maryland.
- Feb 6—"Cosmic Acceleration," F. Halzen, University of Wisconsin.
- Feb 13—"The Use of Balloon Angioplasty in the Treatment of Heart Disease," J. A. Brinker, The Johns Hopkins University.
- Feb 20—"String Field Theory - A Theory of Everything," W. Siegel, University of Maryland.
- Feb 27—"Magnetic Overlayers on Gallium Arsenide Substrates," G. A. Prinz, Naval Research Laboratory.
- Mar 6—"Halley's Comet in Retrospect - A Spectroscopic View," P. D. Feldman, The Johns Hopkins University.
- Mar 13—"Theories of the Nucleus in the 1930's," L. M. Brown, Northwestern University.
- Mar 20—"Verification of a Comprehensive Nuclear Test Ban," T. B. Cochran, Natural Resources Defense Council.
- Mar 27—"Computer Visualization of the Solutions to the Laws of Nature," L. L. Smarr, University of Illinois.
- Apr 3—"The Paleo-Drainage of the Central Sahara as Revealed by Shuttle Imaging Radar," J. F. McCauley, U.S. Geological Survey/Northern Arizona University.
- Apr 10—"Fractals in Nature," R. Voss, IBM Research Laboratories.
- Apr 17—"New Fossil Evidence for Human Evolution," A. C. Walker, The Johns Hopkins University.
- Apr 24—"LF Noise in Disordered Media," R. Rammal, AT&T Bell Laboratories.
- May 1—"Optics, Art, and Surface Evaluation Techniques for Optics of the Future," J. M. Bennett, University of Alabama.
- May 8—"Chaos and Unpredictability in Magnetic Systems," F. Moon, Cornell University.
- May 15—"Critical Fluid Light Scattering on the Shuttle," R. Gammon, University of Maryland.
- May 22—"The National AeroSpace Plane Program - Technology for America's Future," R. M. Williams, DARPA.
- May 29—"VLSI, Cellular Automata, and Application-Specific Processors," R. E. Jenkins, APL.