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PRESENTATIONS

- F. J. Adrian, "Magnetophotoselective Photolysis of Randomly Oriented Radicals in Solids," Univ. Toronto (Oct 10, 1984); also Queen's Univ., Kingston (Oct 24, 1984).
- B. I. Blum, "Language, Problem Solving and System Development," Symp. on the Role of Language in Problem Solving, JHU/APL, Laurel, Md. (Oct 29-31, 1984).
- Z. I. Carpenter, "Retrospective Conversion Options," Iowa Library Assoc. Meeting, Des Moines (Oct 19, 1984).
- H. K. Charles, Jr., "Intracortical Recording Arrays," 15th Neural Prosthesis Workshop, Bethesda (Nov 14-16 1984).
- R. M. Fristrom, M. J. Linevsky, and D. M. Silver, "Atmospheric Ozone as a Potential Chemical Scavenger of Soot," Conf. on Large-Scale Fire Phenomenology, National Bureau of Standards, Gaithersburg, Md. (Sep 12, 1984).
- R. M. Fristrom, "Flames: Experimental Studies and Modeling," Naval Research Laboratory Colloq., Washington (Nov 2, 1984).
- J. Goldhirsh, "Review of Multiple Wavelength Efforts for the Characterization of Rain," URSI General Assembly, Florence (Aug 28-Sep 5, 1984).
- L. W. Hall, Jr., "Field Assessment of Striped Bass Larval Survival Correlated with Contaminant and Water Quality Evaluations," 43rd Atlantic States Marine Fisheries Commission Meeting, Washington (Oct 2-4, 1984).

- L. W. Hall, Jr., "The Effects of an Organic-Inorganic Contaminant Mixture on Fertilization, Hatching Success, and Prolarval Survival of Striped Bass," 114th Meeting, American Fisheries Soc., Cornell Univ. (Aug 12-16, 1984).
- R. W. Hamill, "Psychological Issues in the Design of Expert Systems," 28th Meeting, Human Factors Soc., San Antonio (Oct 22-26, 1984).
- A. N. Jette, C. B. Barger, R. E. Sterner, and B. H. Nall, "Dynamical Computations of Current Image Diffraction (CID) Patterns," 1st International Conf. on the Structure of Surfaces, Berkeley, Calif. (Aug 13-16, 1984).
- S. M. Krimigis, "Acceleration in Planetary Magnetospheres," COSPAR Symp. on Nucleosynthesis and Acceleration of Cosmic Rays, Graz, Austria (Jun 25-Jul 7, 1984).
- S. M. Krimigis, "Preliminary Results from the AMPTE (Active Magnetospheric Particle Tracer Experiment) Spacecraft," Laboratory for Extraterrestrial Physics, 690 Seminar, Goddard Space Flight Center, Greenbelt (Nov 15, 1984).
- A. F. Krummenoehl, "Real-Time Navy Surveillance Radar Simulation," Winter Simulation Conf., Dallas (Nov 28-30, 1984).
- J. R. Kuttler, "Estimating Eigenvalues by Conformal Maps Combined with Intermediate Methods Using Truncation," American Mathematical Meeting, Anaheim (Jan 9-13, 1985).
- K. Moorjani, T. O. Poehler, and F. G. Saticiewicz (APL) and M. A. Manheimer, D. J. Webb, and S. M. Bhagat (Lab. for Physical Sciences), "Dynamics of a Concentrated Spin Glass: α -FeB₂," 30th Conf. on Magnetism and Magnetic Materials, San Diego (Nov 26-30, 1984).
- J. C. Murphy, "Laser and Electron-Acoustic Imaging," Univ. Maryland Physics Seminar, Catonsville (Nov 12, 1984).
- J. C. Murphy (APL), J. MacLachlan (JHU), and R. B. Givens and L. C. Aamodt (APL), "Electron-Acoustic Imaging of Grain Boundaries in Aluminum," American Society of Metals, Detroit (Sep 15, 1984).
- V. O'Brien, "Flow Patterns Associated with Swirl Vortices," 37th APS Fluid Dynamics Meeting, Providence (Nov 18-20, 1984).
- D. K. Pace, "Principles for Managing the Development of Simulation," National Capitol Section, American Soc. for Engineering Management, Vienna, Va. (Nov 20, 1984).
- J. G. Parker, "Optical Dosimetry Techniques in H_pD Photoradiation Therapy," Seminar, FDA Center for Devices and Radiological Health, Rockville, Md. (Oct 25, 1984).
- J. G. Parker, "Optical Monitoring of the Production of Singlet Molecular Oxygen in Solution—Implications for Photoradiation Therapy," Joint IEEE Chapters of Soc. for Quantum Electronics and Soc. for Engineers in Medicine and Biology, Bethesda (Feb 5, 1985).
- L. L. Perini, D. Richards, and G. L. Dugger, "Comparison of Hybrid Geothermal OTEC Plant Alternatives," ASME Winter Meeting, New Orleans (Dec 9-14, 1984).
- D. Richards, W. H. Avery, and E. J. Francis (APL), M. Jones and B. Heyer (Ebasco Services, Inc.), and A. L. Kohl and J. K. Rosemary (Rockwell International), "OTEC Methanol-from-Coal Process Plantship Studies," ASME Winter Meeting, New Orleans (Dec 9-14, 1984).
- D. Richards and F. B. Weiskopf, Jr. (APL) and P. J. Ritzcoven (DOE), "Pneumatic Wave Energy Conversion System Program Developments," ASME Winter Meeting, New Orleans (Dec 9-14, 1984).
- V. M. Root, "An Easy Method for Typesetting Mathematics with Relatively Inexpensive Equipment," Research Institute Publishing Executives Annual Conf., Golden, Colo. (Oct 8-11, 1984). Also at Soc. for Technical Communications, Baltimore Chapter, Columbia, Md. (Dec 11, 1984).
- E. T. Sarris, R. B. Decker, and S. M. Krimigis, "The E-W Asymmetry of ESP Events: Simultaneous Voyager-IMP Observations," COSPAR Symp. on Shocks and Acceleration Processes in Collisionless Plasmas, Graz, Austria (Jun 25-Jul 7, 1984).
- E. T. Sarris (APL), P. C. Trochoutsos (Univ. Thrace), and R. B. Decker and S. M. Krimigis (APL), "Filamentary Structure of ESP Intensities: Voyager-IMP Observations," COSPAR Symp. on Shocks and Acceleration Processes in Collisionless Plasmas, Graz, Austria (Jun 25-Jul 7, 1984).
- R. Turner, "Laser Light Scattering Techniques for Measurement of Size of Gas Bubbles in Liquids," Joint Research Committee, Anheuser-Busch Inc., St. Louis (Jul 13, 1984).
- R. F. Wachter, "Review of Software Engineering Standards," Software Engineering Standards Work Group, McLean, Va. (Jul 11, 1984).
- L. Yan, S. M. Bhagat, and P. Mazumadar (Univ. Maryland) and K. Moorjani and T. J. Kistenmacher (APL), "Macroscopic Dynamic Effects in an Amorphous Ferromagnet," 30th Conf. on Magnetism and Magnetic Materials, San Diego (Nov 28, 1984).
- D. Venkatesan (Univ. Calgary), R. B. Decker and S. M. Krimigis (APL), and J. A. Van Allen (Univ. Iowa), "The in situ Observations of the Cosmic Ray Minimum in the Heliosphere during Solar Cycle 21," Symp. on Cosmic Ray Intensity Variations in the Heliosphere, Univ. Iwate, Japan (Aug 22-25, 1984).
- D. Venkatesan (Univ. Calgary) and R. B. Decker and S. M. Krimigis (APL), "A Review of in situ Observations of Cosmic Ray Intensity in the Heliosphere during 1977-1982," Symp. on Cosmic Ray Intensity Variations in the Heliosphere, Univ. Iwate, Japan (Aug 22-25, 1984).
- D. H. Zaharovitz and H. J. Silverstone (JHU) and D. M. Silver (APL), "Piecewise Polynomial Hylleraas Configuration Interaction Wavefunctions for Helium," Supercomputer Applications Symp., West Lafayette, Ind. (Nov 1, 1984).

The following papers were presented at the American Geophysical Union Meeting, San Francisco (Dec 3-7, 1984):

- H. D. Black, V. L. Pisacane, S. M. Yionoulis, and A. Eisner, "SAGE—A Two-Satellite Experiment for Improving the Gravity Model;"
- R. B. Decker and S. M. Krimigis (APL) and D. Venkatesan (Univ. Calgary), "Voyager 1 and 2 Measurements of Radial and Latitudinal Cosmic Ray Gradients in 1981-84;"
- R. E. Gold and S. M. Krimigis, "The Evolution of Corotating Interaction Regions with Latitude;"
- S. M. Krimigis (APL) and G. Haerendel (Max Planck Inst. for Extraterrestrial Physics), "Preliminary Results from the AMPTE Mission."

COLLOQUIA

- Nov 30, 1984—"High Level Nuclear Waste Disposal," S. F. Singer, George Mason University.
- Dec 7—"Fractals: Concept, Fundamentals and Examples from Materials Science," H. E. Stanley, Boston University.
- Dec 14—"The Physics of Tennis," H. Brody, University of Pennsylvania.
- Jan 4, 1985—"Evidence of Tectonic Plate Motions from Space Measurements," D. E. Smith, Goddard Space Flight Center.
- Jan 11—"Strategic Command and Control," C. A. Zraket, Mitre Corp.
- Jan 25—"Visual Mental Imagery and Hemispheric Specialization: A Computational Approach," S. M. Kosslyn, Harvard University.
- Feb 1—"The Space Telescope: Scientific Instrumentation and General Progress," H. S. Stockman, Space Telescope Science Institute.
- Feb 8—"Life on Earth is Getting Better," J. L. Simon, University of Maryland.
- Feb 15—"Free Electron Lasers," C. W. Roberson, Office of Naval Research.
- Feb 22—"The Physics of Climate," J. Peixoto, University of Lisbon.