

Space Plasma and Radiation Environments: A Scientific Retrospective in Honor of Thomas P. Armstrong

September 13, 2003
University of Kansas

Program

8:45-9:00 Welcome and logistics

Session A: Heliosphere and Solar Wind

9:00-9:30 R. B. Decker, Johns Hopkins University Applied Physics Laboratory
The Outer Heliosphere (invited)

9:30-9:45 Dennis Haggerty, Johns Hopkins University Applied Physics Laboratory
Near-Relativistic Electron Acceleration by Coronal Mass Ejections

9:45-10:00 Joe Giacalone, LPL, University of Arizona
Solar Cosmic Rays

10:00-10:15 J. Douglas Patterson, Fundamental Technologies and Johnson County
Community College
*Steady-State Event-Excluded Proton Spectra at Solar Minimum at all
Heliolatitudes*

10:15-10:30 --coffee break--

10:30-10:45 Carol Maclennan, Lucent Technologies
Traveling with HiScale, and Other Adventures

10:45-11:00 Mikhail Medvedev, University of Kansas
*Collisionless Dissipative Nonlinear Alfvén Waves: Nonlinear Steepening,
Particle Trapping, and Compressible Turbulence*

Session B: Terrestrial and Planetary Magnetospheres

11:00-11:30 S. M. Krimigis, Johns Hopkins University Applied Physics Laboratory
Planetary Magnetospheres (invited)

11:30-11:45 Mona Kessel, NASA Goddard Space Flight Center
Crossing Magnetospheric and Discipline Boundaries

11:45-12:00 Lucas Miller, Fundamental Technologies and the University of Kansas
Verification of the Galileo EPD Pitch and Phase Angles

12:00-2:00 --lunch break--

2:00-2:15 E. V. Bell, II, QSS Group, Inc.
*Development of a Magnetospheric State-Based Trapped Radiation
Database*

2:15-2:30 Thomas E. Cravens, University of Kansas
*X-Ray Emission as a Diagnostic for Magnetosphere-Ionosphere Coupling
at Jupiter*

2:30-2:45 Claude Laird, University of Kansas and Haskell Indian Nations University
Ozone Layer Effects from Nearby Supernovae

Session C: Space Technology, Simulations, and Dusty Plasmas

- 2:45-3:15 Dennis W. Hewett, Lawrence Livermore National Laboratory
Adaptive Particle Simulation: The Next Step in Simulation? (invited)
- 3:15-3:30 --coffee break--
- 3:30-3:45 Yue Ernest Wu, Semiconductor Research and Development Center, IBM
Technological Advances in Very Large Integrated Circuits
- 3:45-4:00 Alexei Nikitin, A3RD LLC
An Instrument "Malfunction" on IMP-8 and What It Taught Us
- 4:00-4:15 Jerry Manweiler, Fundamental Technologies
Dusty Plasmas - Enhancements to Coagulation Rates and Application to the Protoplanetary Nebula
- 4:15-4:30 Shawn Stone, Buena Vista University
Teaching Planet Exploration to Elementary School Students Utilizing a Web-Run Wireless Rover
- 4:30-4:45 Gene Holland, LASP, University of Colorado at Boulder
The New Horizons Mission and the Student Dust Counter (SDC)
- 4:45-5:00 Wrap-up
- 6:30 --prepaid banquet at Hereford House--