
Wednesday PM AP Session 37 Salon 1/2

Antenna Arrays II

A. I. Zagloul and D. H. Schaubert

- 1:20 An Active Antenna Phased Array Doppler Radar with Tracking Capability
S.T. Chew, T. Itoh, UCLA*
- 1:40 Improved Radiation Pattern for 28 GHz Omni-Directional Quasi-Optical
Oscillator Array
Mark J. Vaughan, Richard C. Compton, Cornell University*
- 2:00 Parameter Study of Tapered Slot Antenna Arrays
D. H. Schaubert, J. Shin, University of Massachusetts, Amherst*
- 2:20 Optimal Partially Adaptive Sensor Array Processing
J. Scott Goldstein, Douglas B. Williams, Rome Laboratory, Douglas B. Williams,
Georgia Tech.*
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- 2:40 Basic Design of Beam Tilting Radial Line Slot Antennas
M. Takahashi, M. Yoshiie, M. Abe, Musashi Institute of Technology, Japan*
- 3:00 BREAK
- 3:20 Planar Arrays for MSAT and INMARSAT Land Mobile Satellite Communications
P.C. Strickland, CAL Corporation
- 3:40 Fundamental Properties and Applications of Semi-Active Arrays
Per Olav Iversen, Peter de Maagt, Antoine Roederer, European Space Agency*
- 4:00 Coupling Coefficients and Active Element Patterns of Finite Waveguide Arrays
K.K. Chan, Chan Technologies, R.M. Turner, Defence Research Estb., K. Chadwick, Dept. of National Defence*
- 4:20 Modal Analysis of Rectangular Waveguide Phased Arrays
K.K. Chan, Chan Technologies, R.M. Turner, Defence Research Estb., K. Chadwick, Department of National Defence*
- 4:40 Intermodulation and Bit-Error Ratio Performance of a Ku-Band Multibeam High-Power Phased Array
E. C. Kohls, E. P. Ekelman, A. I. Zaghloul, F. T. Assal, COMSAT Laboratories*

Wednesday PM AP Session 38 Salon 4

Mobile Satellite Communications Antennas

A. N. Tulintseff and J. S. Colburn

- 1:20 Consideration on Design of Antenna Array with Cross Radiation Pattern
Shigeru Egashira, Takayuki Tanaka, Hiromasa Kawaguchi, Saga University, Shigeru Uchino, Harada Industry Co. Ltd.*
- 1:40 Bidirectional Collinear Antenna with Arc Parasitic Plates
Keizo Cho, Toshikazu Hori, Hajime Tozawa and Shinji Kiya, Nippon Telegraph and Telephone Corporation*
- 2:00 Analysis of a Square Helix Applicable to the Personal Satellite Communication Handset
J.S. Colburn, Y. Rahmat-Samii, UCLA*
- 2:20 Elliptical Curl Antennas In MSAT
Zhong-Hua Wang, Jean-Jacques Laurin, Renato G. Bosisio, Ecole Polytechnique de Montreal
- 2:40 Antenna Angle Error Correction to Radome Curvature
Kaichiang Chang, Raytheon Company

- 3:00 BREAK
- 3:20 Circularly Polarized Multibeam Radial Line Slot Antennas for Mobile Satellite Communication
Jun-ichi Takada, Tatsuya Yamamoto, Makoto Ando, Naohisa Goto, Tokyo Institute of Technology
- 3:40 U-Shaped Slots for Circularly Polarized Slotted Waveguide Array
K-S. Min, J. Hirokawa, M. Ando N. Goto, Tokyo Institute of Technology*
- 4:00 Spherical Microstrip Arrays for Mobile Satellite Communication
Probir K. Bondyopadhyay, NASA Johnson Space Center
- 4:20 An Analysis of a Circular Aperture Antenna Covered with a Dielectric Hemi-Spherical Shell Radome over Ground Plane
L. W. Li, P. S. Kooi, M. S. Leong, T. S. Yeo, X. Ma, National University of Singapore*
- 4:40 Microstrip Phased Array for Mobile Satellite Terminals
Daniel J. Bem, Pawel Kabacik, Technical University of Wroclaw, Poland*
- 5:00 A Four Beam-Switched Planar Array Antenna for Mobile Terminals
Nobuhiro Kuga, Hiroyuki Arai, Yokohama National University*

Wednesday PM AP Session 39 Salon B

Hybrid Methods

K. A. Michalski and K. J. Webb

- 1:20 Hybrid Analysis (MM-UTD) of EM Scattering from Finned Convex Objects
M. Hsu, P. H. Pathak, The Ohio State University
- 1:40 Iterative Improvement of Physical Optics Hybrid Method - POHM Iterative
Richard E. Hodges, Yahya Rahmat-Samii, UCLA*
- 2:00 FEM/BEM-Hybrid Approach for Layered Media
Thomas F. Eibert Volkert Hansen, Bergische Universitat*
- 2:20 A Hybrid FEM/MoM Approach for Analyzing Inhomogeneous Structures with Fine Features
U. Pekel, R. Mittra, University of Illinois, E. Ngai, T. Wells, A. Cohen, Electronic Space Systems Corp.
- 2:40 Hybrid Finite Element-Mixed-Potential Integral Equation-Discrete Complex Image Approach for Inhomogeneous Waveguides in Layered Media
J. Wu, K. A. Michalski, Texas A&M University*
- 3:00 BREAK

- 3:20 Hybridization of SBR and FEM for Scattering by Large Bodies with Cracks and Cavities
Jian-Ming Jin, Sean Ni, Shung-Wu Lee, University of Illinois*
- 3:40 An Exact Hybrid Numerical Boundary Condition for Electromagnetic Scattering Problems
Yinshang Liu, Kevin J. Webb, Purdue University*

Wednesday PM AP Session 40 Salon C

Analysis and Synthesis of Microstrip Patch Antennas

A. Z. Elsherbeni and D. P. Nyquist

- 1:20 Comparison Between Microstrip and Wire Antenne
A. Gharsallah, A. Bouallegue, Faculte des Sciences de Tunis, H. Baudrand, Ecole Polytechnique*
- 1:40 Optimization of Microstrip Open End
Franco De Flaviis, Ming-Ju Tsai, University of California, Los Angeles, Shih-Chang Wu, New Jersey Institute of Technology, Nicolaos G. Alexopoulos*
- 2:00 Surface Wave Mode Reduction For Rectangular Microstrip Antennas
I. Papapolymrou, R.F. Drayton, L.P.B. Katehi, University of Michigan*
- 2:20 An Automatic Mesh Complexity Reduction Scheme for the Derivation of Equivalent Circuits of Microstrip Interconnection Discontinuities
G. Coen, D. DeZutter, N. Fache, University of Gent*
- 2:40 An Improved Approach to Implement a Microstrip to Waveguide Transition
G. Zarba, G. Bertin, L. Accatino, P. Besso, CSELT*
- 3:00 BREAK
- 3:20 Application of Matrix Pencil Technique to Analysis of Microstrip
Z.A. Maricevic, T.K. Sarkar, Syracuse University*
- 3:40 FDTD Analysis of Active Circuits with Equivalent Current Source Approach
Chien-Nan Kuo, University of California at Los Angeles, Bijan Houshmand, Jet Propulsion Laboratory, Tatsuo Itoh, University of California at Los Angeles
- 4:00 Full Field and Quasi-TEM Time Domain Numerical Analysis of Coupled Microstrip Circuits
Joe LoVetri, Doru Mardare, University of Western Ontario, Atef Z. Elsherbeni, Charles E. Smith, University of Mississippi*
- 4:20 Cross-Polarization Analysis of Lossy Microstrip Resonators
John M. Damaschke, Smain Amari, Jens Bornemann, University of Victoria*
- 4:40 An Analysis of Leaky Modes Excited on Stripline Structures
D. Infante, D. P. Nyquist, Michigan State University*

Wednesday PM AP Session 41 Salon E

Numerical Algorithms

E. Blezynski and R. Kastner

- 1:20 Fast Multipole Method Solution of Three Dimensional Integral Equation
J. M. Song, W. C. Chew, University of Illinois, Urbana*
- 1:40 Fast Computation of 3D Inhomogeneous Scattered Field Using a Discrete
BDG-FFT Algorithm
Hong Gan, W. C. Chew, University of Illinois, Urbana*
- 2:00 A Sparse Moment Method Technique for a Wide Class of Scattering
Problems
Sunil S. Bindiganavale, John L. Volakis, The University of Michigan*
- 2:20 Matrix Thinning with Reduced Field Testing (RFT)
Raphael Kastner, Gabriela Nocham, Tel Aviv University*
- 2:40 The Lattice Gas Automata for Computational Electromagnetics
Nikhil Adnani, University of Manitoba, Neil R. S. Simons, Communications
Research Centre, Ottawa, Greg E. Bridges, University of Manitoba*
- 3:00 Multi-Grid Method and Diakoptic Theory
C.F. Wang, D.G. Fang, Nanjing University of Science and Technology*

Wednesday PM AP Session 42 Salon E

C A D of Microwave Components

A. Prata and H-W. Yao

- 3:40 Branch Guide Coupler in Rectangular Coaxial Line
G. Bertin, L. Accatino, D. Merletti, CSELT*
- 4:00 Grating-Type Polarizers Using Small Number of Rectangular Grooves
Optimized for Maximum Isolation
F. J. S. Moreira, Aluizio Prata, Jr., University of Southern California*
- 4:20 Numerical Design Technique for Waveguide T-junction in H-plane
J. Kim, H. Lee, H.K. Jung, S. Hahn, Seoul Nat'l University, C. Cheon, Kangwon
Nat'l University, H. Kim, Soonchunhyang University*
- 4:40 Modeling Conducting Posts in Rectangular Waveguides for Filter
Applications
Hui-Wen Yao, Chi Wang, Kawthar A. Zaki, University of Maryland

Wednesday PM AP Session 43 Salon F

Biomedical Applications

R. D. Nevels and N. K. Uzunoglu

- 3:20 Microwave Antenna Design for Myocardial Tissue Ablation Applications
Robert D. Nevels, Texas A&M University, Dickey Arndt, James Carl, George Raffoul, Johnson Space Center, Antonio Pacifico, Methodist Hospital, Houston, TX
- 3:40 Iterative Solutions of Three-Dimensional Electric Fields and Absorbed Powers inside a Human Body Illuminated by a Horn-Antenna Annular Phased Array
Tianquan Deng, Xiaoguo Liu, National University of Singapore
- 4:00 Power Deposition From Multiple Coupled Waveguide Applicators into a Multilayer Lossy Cylinder
K.S. Nikita, N.K. Uzunoglu, University of Athens*
- 4:20 GRATMA Method for Biomedical Applications: Comparison with the CGM-FFT
J. J. Mallorqui, M. Rodriguez, Universitat Politecnica de Catalunya*

Wednesday PM AP Session 44 Schooner/Sloop

Inverse Scattering

W. Chew and B. D. Jersak

- 1:20 Ground Penetration Radar Target Classification via Complex Natural Resonances
Chi-Chih Chen, Leon Peters, Jr., Walter D. Burnside, The Ohio State University*
- 1:40 Comparison of Layer-Peeling Inverse Scattering Using Three Derived Lattice Models of Multilayered Media
S. Giles, University of Toledo
- 2:00 Decomposition of Frequency Domain RCS Data Using a Damped Exponential Model
M.J. Gerry, E.K. Walton, Ohio State University*
- 2:20 Modified Gradient Profile Inversion Using H-polarized Waves
Wen Lixin, Ralph E. Kleinman, University of Delaware, Peter M. van den Berg, Delft University of Technology*
- 2:40 Effects of Phase Discontinuities in Banded Data when Generating Holographic Synthetic Aperture Radar Images
Brian D. Jersak, Marc J. Byrd, Brendan D. Krenek, Andrew J. Blanchard, Houston Advanced Research Center*

- 3:00 BREAK
- 3:20 Prediction-Correction Algorithm for Electromagnetic Imaging
Y. Liu, I.R. Ciric, University of Manitoba*
- 3:40 A Frequency-Hopping Approach for Microwave Imaging of Large Inhomogeneous Bodies
W. C. Chew, J. H. Lin, University of Illinois, Urbana
- 4:00 3D Inhomogeneous Inversion for Microwave Imaging Using Distorted Born Iterative Method and BCG-FFT
Hong Gan, W. C. Chew, University of Illinois, Urbana*
- 4:20 Reconstruction of One-Dimensional Lossy Dielectric Profiles
Giuseppe Mazzarella, Univ. di Cagliari, Gaetano Panariello, Univ. Federico II di Napoli*
- 4:40 Forward and Backward Propagators Applied to Direct and Inverse Scattering of the Scalar Field in the Resonance Region
G.F. Crosta, Universita' Degli Studi di Milano
- 5:00 An Iterative Numerical Algorithm for Electromagnetic Imaging
C. Su, J. Yang, Northwestern Polytechnical University*

Wednesday PM AP Session 45 Trimaran/Brigantine

Frequency Selective Surfaces

S. Berkeshli and D. R. Jackson

- 1:20 High Q Resonances in FSS
Alon S. Barlevy, Yahya Rahmat-Samii, UCLA*
- 1:40 Analysis of Frequency Selective Surface on Biased Ferrite Substrate
G.Y. Li, Y.C. Chan, City University of Hong Kong, T.S. Mok, Inchape Testing Service, J.C. Vardaxoglou, Loughborough University of Technology*
- 2:00 Analysis of Frequency Selective Surfaces with Ferrite Substrates
Y. Liu, C. G. Christodoulou, P. F. Wahid, University of Central Florida, N. E. Buris, Motorola Inc.*
- 2:20 Analysis of Frequency Selective Surfaces with Arbitrarily Shaped Apertures by Finite Element Method and Generalized Scattering Matrix
Manuel Lambea, Miguel A. Gonzalez, Jose A. Encinar, Juan Zapata, Universidad Politecnica de Madrid*
- 2:40 Exploitation of Symmetries in the Impedance Matrix for Moment-Method Analysis of Arbitrary Frequency-Selective Surfaces
Changhua Wan, Jose A. Encinar, Universidad Politecnica de Madrid*
- 3:00 BREAK

- 3:20 A Leaky-Wave Antenna Using a Two-Dimensional Periodic Array of Metal Patches
Antonio Ip, David R. Jackson, University of Houston
- 3:40 On the Analysis and Design of the Frequency Selective Surface for the N-Star Satellite KU/S-Shaped Reflector
S. Barkeshli, T. Smith, H. S. Luh, L. Ersoy, Space Systems/Loral*
- 4:00 Inter Orbit Link Antenna for the Artemis Satellite
P. Capece, A. Basile, R. Ravanelli, M. Di Fausto, Alenia Spazio, P. Foldes, Foldes Inc.
- 4:20 Performance Measurement of Frequency Selective Reflector Using Planar Near-Field Techniques
S Honma, S. Makino, Mitsubishi Electric Co., T. Itanami, NTT Wireless Systems
- 4:40 Scattering by a Two Dimensional Periodic Array of Conducting Rings on a Chiral Slab
T. Ege, University of Gaziantep

Wednesday PM Joint/URSI-B Session 10 Salon 3

Special Session

In Honor of Victor Galindo-Israel

Yahya Rahmat-Samii and Raj Mittra

- 1:20 Opening Remarks
Yahya Rahmat-Samii, UCLA, Raj Mittra, University of Illinois
- 1:40 Many-Faceted Contributions of Victor Galindo to the Analysis and Synthesis Problems Related to Reflector Antennas
Raj Mittra, University of Illinois*
- 2:00 High Performance, Low Cost Reflector Antennas
Warren L. Stutzman, Marco A.B. Terada, Virginia Polytechnic Institute and State University*
- 2:20 Examples of Shaped Reflectors from a New Shaping Method
Lynn Baker, Cornell University
- 2:40 Compensation of Gravity-Induced Structural Deformations on a Beam-Waveguide Antenna Using a Deformable Mirror
W. A. Imbriale, M. Moore, D. J. Rochblatt, W. Veruttipong, Jet Propulsion Laboratory*
- 3:00 BREAK

- 3:20 MBA versus Phased Array for Electronic Beamsteering
William C. Wong, TRW Electronics Systems & Technology Division
- 3:40 A Comparison of Two Spherical Wave Expansion Techniques Using the Circular Aperture as an Illustrative Example
R.G. Yaccarino, Hughes Aircraft, Sembiam R. Rengarajan, CSUN*
- 4:00 Modified Jacobi Polynomials in Analysis, Synthesis and Measurements of Antennas
Y. Rahmat-Samii, UCLA
- 4:20 Closing Remarks

Wednesday PM URSI-B Session 18 Catamaran

Theoretical Electromagnetics I

A. A. Oliner and N. Engheta

- 1:20 Can One "Hear" the Handedness or Topology of A Knot?
D. L. Jaggard, O. Manuar, University of Pennsylvania
- 1:40 Fractional Derivatives, Fractional Integrals and Electrostatic Image Methods
Nader Engheta, University of Pennsylvania
- 2:00 Applications of Fractional Calculus to Fields of Finite-Size Sources
Nader Engheta, University of Pennsylvania
- 2:20 Puzzles Relating to Radiation Fields Within the Spectral Gap Between Surface Waves and Leaky Waves
A. A. Oliner, Polytechnic University, D. R. Jackson, University of Houston, H. Ostner, Technische Universitat Munchen*
- 2:40 A Derivation of Recursion Relations of the Translational Theorems for Scalar and Vector Spherical Harmonics
Kristopher T. Kim, Rome Laboratory
- 3:00 BREAK
- 3:20 Field Penetration and Charge Distribution in a Polarized Semiconductor Sphere
Thomas Wong, Xinhua Hu, Illinois Institute of Technology*
- 3:40 Solution for Radiation Characteristics of a Thin Truncated Dielectric Disk Antenna by the Method of Steepest Descent and Weinger-Hoff Technique
Chinmoy Das Gupta, A. C. Trivedi, Indian Institute of Technology, Anup Gogoi, Assam Engg. College*
- 4:00 Total Surface Current on a PEC Angular Sector
W. J. Koh, R. J. Marhefka, The Ohio State University ElectroScience Laboratory*

- 4:20 Rigorous Solution to the Problem of Dielectric Slab Natural Modes Scattering from Compound Resonant Cylindrical Inhomogeneity
Andrey S. Andrenko, Ukrainian Academy of Sciences
- 4:40 Free Electromagnetic Oscillations and Waves of Gratings and Scattering Anomalous Regimes
Vasily V. Yatsik, Institute of Radiophysics & Electronics of the National Academy of Sciences of Ukraine
- 5:00 Normal Modes in Open Waveguides with Non-compact Boundaries
Youri V. Shestopalov, Vadim V. Lozhechko, Moscow State University*

Wednesday PM URSI-B Session 19 Salon 5

Finite Difference Time Domain Methods

R. W. Ziolkowski and R. Janaswamy

- 1:20 An Investigation of Arbitrary Grid Finite Difference Time Domain Algorithms
A. M. Davidson, J. LoVetri, The University of Western Ontario, N. R. S. Simons, Communications Research Centre*
- 1:40 3D FDTD Treatment of Perfect Electric Conductors
J. Anderson, M. Okoniewski, S. S. Stuchly, University of Victoria*
- 2:00 An Optimized Finite Difference Scheme for Time Domain Maxwell's Equations
Ramakrishna Janaswamy, Naval Postgraduate School, Yen Liu, NASA Ames Research Center*
- 2:20 SVD Based Prony Hildebrand Technique for CFDTD Processing
Ali Asi, Lotfollah Shafai, University of Manitoba*
- 2:40 Simulation and Measurement of High Speed Digital Test Modules
M. Piket-May, J. Mix, D. Barnhart, University of Colorado at Boulder, Roger Gravrok, Kevin Thomas, Cray Research Inc.*
- 3:00 BREAK
- 3:20 An FDTD Simulator for Ground-Probing Radars
Zhubo Huang, Kenneth Demarest, Richard Plumb, Pawan Chaturvedi, The University of Kansas*
- 3:40 An Explicit Finite Element Time Domain Method Using Whitney Forms
Jin-Fa Lee, Zachary Sacks, Worcester Polytechnic Institute*
- 4:00 A Non-Dissipative Upstream Biased Scheme for Time Domain Computational Electromagnetics
Brian T. Nguyen, Philip L. Roe, University of Michigan*

- 4:20 An Accelerated Algorithm for the Time Domain Analysis of Guided Wave Problems Involving Ferrites
*M. Okoniewski **, *University of Victoria*, *M. Mrozowski*, *Technical University of Gdansk*

Wednesday PM URSI-A Session 20 Salon A

Impulse Radar

J. P. Hansen and L. Peters

- 1:20 Ground Penetrating Radar Antennas
*Leon Peters, Jr.**, *Chi-Chih Chen*, *Frank Paynter*, *The Ohio State University*
- 1:40 Time-Domain Imaging of Radar Targets using Ultra-Wideband or Short Pulse Radars
Y. Dai, *E. J. Rothwell**, *D. P. Nyquist*, *K. M. Chen*, *Michigan State University*
- 2:00 Calibration of an Impulse Radar Scattering Range with Conducting and Dielectric Canonical Targets: Sphere, Cube and Knife Edge
*M. Piette**, *E. Schweicheir*, *Royal Military Academy Brussels*, *A. Vander Vorst*, *Univ. Cath. de Louvain*
- 2:20 Aspect Angle Sensitivity of Backscatter Measured by an Ultrawideband Synthetic Aperture Radar for Detection of Obscured Targets
*Ravinder Kapoor**, *U. S. Army Research Laboratory*, *N. Nandhakumar*, *University of Virginia*
- 2:40 Ultrawideband, Impulse Driven X-Band Clutter Measurement Radar
*J. P. Hansen**, *M. Sletten*, *K. Scheff*, *Naval Research Laboratory*
- 3:00 BREAK
- 3:20 Enhanced Detection of Radar Targets in a Realistic Sea Clutter Environment Using E-Pulse Clutter Cancellation
G. Wallinga, *E. J. Rothwell**, *D. P. Nyquist*, *K. M. Chen*, *A. Norman*, *Michigan State University*
- 3:40 On a New Family of E-Pulses for UWB Radar Target Discrimination
*Sergey Primak**, *Ben-Gurion University of the Negev*, *Margarita Horenian**, *Library of the Russian Academy of the Science*
- 4:00 Matching Score Properties Between Range Profiles of High Resolution Radar Targets
*Hsueh-Jyh Li**, *Yung-Deh Wang*, *National Taiwan University*

Microstrip II

C. G. Christodoulou and J. L. Volakis

- 1:20 FD-TD Analysis of Microstrip Antennas with Ferrite Substrates
*T. Spreckic-Zugec**, *C. G. Christodoulou, University of Central Florida*
- 1:40 Radiation Patterns of Microstrip Antennas on Very Small Ground Planes
*W. Zhou, P. F. Wahid**, *C. G. Christodoulou, University of Central Florida*
- 2:00 Input Impedance of a Microstrip Wrap-Around Antenna on a Conical Surface
*D. N. Meeks, P. F. Wahid**, *University of Central Florida*
- 2:20 Computation of Radiation Pattern of Microstrip Patch Antennas on Complex Bodies
*Sean Ni**, *Jian-Ming Jin, Shung-Wu Lee, University of Illinois at Urbana-Champaign*
- 2:40 An Efficient Hybrid FEM Formulation for Analysis of Cavity-Backed Thin Spiral Slot Antenna
*Jian Gong**, *John L Volakis, University of Michigan*
- 3:00 BREAK
- 3:20 The Sinusoidal Microstrip Patch Antenna
Mohammad A. Saed, State University of New York at New Paltz
- 3:40 Gain Calculations for Large Microstrip Antenna Arrays using Different Feed Networks
*Mohammad Shahid**, *Alakananda Paul, Howard University*
- 4:00 Wire-Grid Modeling of Single- and Double-Layered Perforated Microstrip Antenna
*H. Moheb**, *InfoMagnetics Technologies Corp., L. Shafai, University of Manitoba*
- 4:20 A Study of Microstrip Antennas on Very High Permittivity Substrate and Very Small Ground Plane
*Alessandro Perrotta**, *Motorola, Ahmad Hoorfar, Villanova University*
- 4:40 Analysis of Cylindrical Patch Microstrip Antenna with Circular Polarization by FD TD Method
*Yasuhiro Kazama**, *Tamotu Suda, Japan Radio Co., Ltd., Nagayoshi Morita, Chiba Institute of Technology*
- 5:00 A Radiation Mode Expansion Formulation of Radiated Fields From Microstrip Line Discontinuities
Nagayoshi Morita, Chiba Institute of Technology

Propagation Phenomenology

F. T. Djuth

- 1:20 The Polar Cap Ionosphere Above 80 Degrees Invariant Latitude
L. E. Montbriand, Communications Research Centre

- 1:40 An Investigation of Lightning-Induced Ionospheric Effect Using RF
Diagnostics
K. M. Groves, J. V. Rodriguez, PL/GPIA, J. C. Foster, MIT Haystack Observa-
tory, J. M. Quinn, PL/GPIA*

- 2:00 Measurements of Sprites and Blue Jets with High-Frequency Diagnostics
Frank T. Djuth, Geospace Research, Inc.

- 2:20 Formation and Relaxation of a Stratified Structure in the Ionospheric
Plasma During its Heating (Theoretical and Experimental Investigations)
N. Blaunstein, Ben Gurion University of the Negev, G. S. Bochkarev, IZMIRAN

- 2:40 Spatial and Dynamical Properties of the Ionospheric Plasma Response to
Processes Arising Due to the Nonlinear Interaction of Two UHF Waves
V. V. Yevstafiev, Institute of Solar-Terrestrial Physics