--- AP-S General Topics ---

1. Adaptive, active, and smart antennas
2. Analysis for multi-scale problem
3. Biomedical applications
4. Broadband antennas
5. Chaotic systems
6. Complex media
7. Digital beamforming
8. Electromagnetic bandgap structures
9. Electromagnetic education
10. Electromagnetic properties of materials
11. Electromagnetic theory
12. EM measurement
13. FEM methods
14. FDTD methods
15. Frequency-selective surfaces
16. High frequency and asymptotic methods
17. Indoor and urban propagation models
18. Integral equation methods
19. Inverse scattering
20. Manufacturing techniques
21. Measurement techniques
22. Metamaterials
23. Microstrip antennas, arrays, and circuits
24. Military applications
25. Mobile and PCS antennas
26. Monolithic array techniques

27. Multi-frequency antennas
28. Nano-electromagnetics
29. Non-linear electromagnetics
30. Numerical methods
31. Optimization methods in EM design
32. Phased-array antennas
33. Photonics in antenna systems
34. Propagation
35. Propagation in rough enclosures
36. Quasi-optical techniques
37. Radar imagery
38. Random media and rough surfaces
39. Reconfigurable antennas and arrays
40. Reflector antennas
41. Remote sensing
42. Scattering, diffraction, and RCS
43. Transients and time-domain techniques
44. Ultra wideband systems
45. Waveguiding structures
46. Wearable antennas
47. Conformal antennas
48. Electrically small antennas
49. Other topics

--- APS Special Sessions ---

On-Chip Electromagnetics

Novel Antenna Design Concepts and Technologies for Space and Earth Science Missions

Holographic Antennas

Antenna and Propagation Aspects for Multi-Gigabit Systems beyond 100 GHz

Antennas and Printed RF Electronics for Item-Level RFID and WPAN Applications

Recent Small Antennas and Sensors: Design and Applications

--- Joint APS/URSI Special Sessions ---

Memorial Session for Professor Donald G. Dudley, Jr.

Memorial Session for Professor Charles H. Papas

Special Session in Honor of Professor Prabhakar H. Pathak

Enabling Technology for Multifunction and Interoperable Communication Systems: Reconfigurable Antennas and RF Front Ends

Advances in Computational Simulations for Biophotonics

Waveform Diversity for Complex Environments: Antennas, Methods, and Measurements

--- URSI Topics of Interest ---

--- Commission A ---

(Electromagnetic Metrology)

V. K. Nair:

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A1. Microwave to sub-millimeter measurements/standards

A2. Quantum metrology and fundamental concepts

A3. Time and frequency

A4. Time-domain metrology, EM-field metrology

A5. EMC and EM pollution

A6. Noise

A7. Materials

A8. Bioeffects and medical applications

A9. Antenna

A10. Impulse radar

A11. Interconnect and packaging

--- Commission B ---

(Fields and Waves)

D. R. Jackson:

djackson@uh.edu

B1. Antenna arrays

B2. Antenna theory, design, and measurements

B3. Complex, novel, or specialized media:

B3.1. Electromagnetic bandgap (EBG) structures

B3.2. Biological media

B3.3. Geophysical media

B3.4. Metamaterials

B4. Educational methods and tools

B5. Electromagnetic interaction and coupling

B6. Guided waves and wave-guiding structures

B7. High-frequency techniques

B8. Inverse scattering and remote sensing

B9. Microstrip antennas and printed devices

B10. Nanoscale electromagnetics

B11. Nonlinear electromagnetics

B12. Numerical Methods:

B12.1. Fast Methods

B12.2. Finite-Difference methods

B12.3. Frequency-Domain methods

B12.4. Hybrid methods

B12.5. Integral-Equation methods

B12.6. Time-Domain methods

B13. Optimization techniques

B14. Propagation phenomena and effects

B15. Rough surfaces and random media

B16. Scattering and diffraction

B17. Theoretical electromagnetics

B18. Transient fields, effects, and systems

B19. Ultra-wideband electromagnetics

B20. Wireless communications

--- Commission C ---

(Signals and Systems)

D. Palmer

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C1. Sensor array processing

C2. Physics-based signal processing

C3. Signal processing for radar remote sensing

C4. Synthetic aperture and space-time processing

C5. Distributed sensor networks

C6. Computational imaging and inverse methods

C7. Statistical signal processing of waves in random media

C8. Radar target detection, localization, and tracking

C9. Sensor array calibration

--- Commission D ---

(Electronics and Photonics)

L. W. Pearson

pearson@ces.clemson.edu

D1. Electronic devices and applications

D2. Photonic devices and applications

D3. Physics, materials, CAD, device technology and reliability

--- Commission E ---

(Electromagnetic Noise and Interference)

C. Ropiak

cropiak@earthlink.net

E1. High-power electromagnetics

E2. Effects of transients on electronic systems

E3. Spectrum management and utilization

E4. Communication in the presence of noise

--- Commission F ---

(Wave Propagation and Remote Sensing)

R. Lang

lang@gwu.edu

F1. Point-to-point propagation effects

F2. Measurements

F3. Mobile/fixed channels

F4. Random and deterministic models

F5. Horizontal/slant propagation paths

F6. Hydrometeorities

F7. Interaction with the atmosphere

F8. Land or water propagation paths

F9. Atmospheric constituents

F10. Indoors/outdoors wireless

--- Commission G ---

(Ionospheric Radio and Propagation)

Attila Komjathy

Attila.Komjathy@jpl.nasa.gov

J. D. Mathews

jdm9@psu.edu

G1. GNSS

G2. Ionospheric imaging

G3. Ionospheric morphology

G4. Ionospheric modeling and data assimilation

G5. Transionospheric radio propagation/systems effects

G6. Radar and radio techniques for ionospheric diagnostics

G7. Space weather – radio effects

--- Comission K ---

(Electromagnetics in Biology and Medicine)

Gianluca Lazzi

lazzi@ncsu.edu

K1. Biological effects

K2. Biomedical applications

K3. Dosimetry

K4. Exposure assessment

K5. Applications of RF to medicine

--- URSI Special Sessions ---

Nanoelectromagnetics

Electromagnetic Cloaking

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