WE4A Electromagnetic Theory Based CAD

Chair: I. Wolff, Duisburg University-Germany

ROOM A201

WE4A-1: *A Fast and Rigorous Synthesis Procedure for (Monolithic) Millimeterwave Integrated Circuit Layouts*
M. O. Thieme, E. M. Biebl, TU Munchen, Munchen, Germany

WE4A-2: *Rigorous and Efficient Fabrication-Oriented CAD and Optimization of Complex Waveguide Networks*
F. Alessandri, M. Dionigi, R. Sorrentino, L. Tarricone, Inst. of Elec., Univ. of Perugia, Perugia, Italy

WE4A-3: *A Unified Approach for Mixed EM and Circuit Simulation Using Model-Reduction Techniques*
M.A. Kolbehdari, R. Achar, M. Nakhla, Dept. of Elec., Carleton Univ., Ontario, Canada

WE4A-4: *Coupled Localized and Distributed Elements Analysis Applying an Electromagnetic Software in the Frequency Domain*
D. Baillargeat, E. Larique, S. Verdeyme, M. Aubourg, R. Sommet, P. Guillon, IRCOM, Limoges, France

WE4A-5: *New Formulae for the Initial Design in the Optimization of T-Junction Manifold Multiplexers*
A. Morini, Dip. Elett. Univ. of Ancona, Ancona, Italy

WE4A-6: *From Layout to Schematic Using Pattern Recognition in Microwave Computer Aided Design*
S. Tadjiky, R. H. Jansen, Aachen Univ. of Tech. (RWTH), Dept. of EE, Aachen, Germany

WE4B Millimeter-Wave Mixers and Switches

Chair: M. Schindler, ATN Microwave

ROOM A207

WE4B-1: *Wide-band SSB Subharmonically Pumped Mixer MMIC*
H. Okazaki, Y. Yamaguchi, NTT Wireless Systems Labs., Kanagawa, Japan

WE4B-2: *A Planar Circuit Design for High Order Sub-Harmonic Mixers*
T. J. Ellis, Rad. Lab., EECS Dept., Univ. of Michigan, Ann Arbor, MI

WE4B-3: *Ka-Band Spur Canceling Mixer for High IF Application*
Y. Liu, O. Fordham, W. Copeland, Hughes Space & Comm. Co., El Segundo, CA

WE4B-4: *Active, Monolithically Integrated Coplanar V-Band Mixer*
M. Schefer, U. Lott, H. Benedickter, H. Meier, W. Patrick, W. Bachtold, Lab. for EM Fields & Microwave Elec., Zurich, Switzerland

WE4B-5: *A High-Performance W-Band GaAs PIN Diode Single-Pole Triple-Throw Switch CPW MMIC*
M. Case, M.Matloubian, H.-C. Sun, D. Choudhury, C. Ngo, Hughes Research Labs., Malibu, CA

WE4C Quasi-Optical Oscillators

Chair: R. York, University of California, Santa Barbara

ROOM A102

WE4C-1: *Feedback Optimization of Grid Oscillators*
W.A. Shiroma, Univ. of Hawaii, Honolulu, HI, Z.B. Popovic, Univ. of Colorado, Boulder, CO

WE4C-2: *A 43-GHz AlInAs/GaInAs/InP HEMT Grid Oscillator*
P. Preventzk, D.B. Rutledge, California Inst. of Tech., Dept. of EE, Pasadena, CA, M. Matloubian, Hughes Research Labs., Malibu, CA

WE4C-3: *Phase Noise in Coupled Oscillator Arrays*
H.-C. Chang, X. Cao, U.K. Mishra, R.A. York, Dept. of ECE, Univ. of California, Santa Barbara, CA

WE4C-4: *HBT Active Antenna as a Self Oscillating Doppler Sensor*
M.J. Kelly, Merlin Microwave Ltd., Belfast, Ireland, J.A.C. Stewart, A.D. Patterson, Dept. of EEE, Queen's Univ. of Belfast, Belfast, Ireland

WE4C-5: *The Active Phased Array Antennas Coupled Through Slotlines*
C. Mun, Dept. of EE, H.K. Park, Y.J. Yoon, Dept. of Radio Comm. Eng., Yonsei Univ., Seoul, Korea

WE4C-6: *Computer Aided Engineering Environment for Spatial Power Combining Systems*
F. Nusseibeh, J. Kreskovsky, Scientific Research Assoc., Inc., Glastonbury, CT, T.W. Nuteson, J. Patwardham, M.A. Summers, C.E. Christoffersen, M.B. Steer, Dept. of ECE, North Carolina State Univ., Raleigh, NC

WE4D Passive Bandpass Filters

Chair: G.L. Matthaei, University of California, Santa Barbara

ROOM A101

WE4D-1: *Conductor Loaded Resonator Filters with Wide Spurious Free Stop Band*
C. Wang, K.A. Zaki, Univ. of MD, EE Dept., College Park, MD, A.E. Atia, CTA Inc., Rockville, MD, T. Dolan, K&L Microwave Inc., Salisbury, MD

WE4D-2: *Elliptical Cavity Resonators for Dual-Mode Narrowband Filters*
L. Accatino, G. Bertin, CSELT, Torino, Italy, M. Mongiardo, Univ. di Perugia, Perugia, Italy

WE4D-3: *Alternative Designs for Dual-Mode Filters*
D. R. Jachowski, Maui Filter Works, Pukalani, HI

WE4D-4: *Design and Realization of a Four Pole Elliptic Microwave Filter Using Low Dielectric Loaded Cavities*
S. Gendraud, S. Verdeyme, P. Guillon, IRCOM, Limoges, France, M. Chaubet, J. Sombrin, CNES, Toulouse, France, S. Vigneron, B. Theron, Alcatel Espace, Toulouse, France

WE4D-5: *Generalized Cross-Coupled Filters Using Evanescent Mode Elements*
R. V. Snyder, RS Microwave, Butler, NJ

WE4D-6: *Improvement of Spurious Performance of Combline Filters*
H.-W. Yao, CTA Inc., Rockville, MD, K.A. Zaki, A.E. Atia, EE Dept., Univ. of MD, College Park, MD, T. Dolan, K&L Microwave Inc., Salisbury, MD

WE4D-7: *Dual Mode Combined Dielectric and Conductor Loaded Cavity Filters*
C. Wang, K.A. Zaki, Univ. of MD, EE Dept., College Park, MD, A.E. Atia, CTA Inc., Rockville, MD

WE4E Ferrite Devices: Modeling and Applications

Chair: J.M. Owens, Auburn Univ., Co-chair: M.N. Afasar, Tufts University

ROOM A108

WE4E-1: *Nonreciprocity of a Coplanar Waveguide with a Transversely Magnetised Ferrite Layer*
L. Zhou, L. E. Davis, Dept. of EEE, UMIST, Manchester, UK

WE4E-2: *Finite-Difference Time-Domain Analysis of Microwave Ferrite Devices*
B. S. Yildirim, E. El-Sharawy, Dept. of EE, Arizona State Univ., Tempe, AZ

WE4E-3: *Modeling a Stripline Ferrite Phase Shifter*
S. N. Stitzer, Northrop Grumman ESSD, Baltimore, MD

WE4E-4: *Microwave Phase Shift Using Ferrite-Filled Waveguide Below Cutoff*
C. R. Boyd, JR., Microwave Applications Group, Santa Maria, CA

WE4E-5: *C Band Ferrite Microstrip Limiter*
J.J. Green, Microwave Magnetics, Lexington, MA

WE4E-6: *Effective-Field Theory for Ferrite Thin-Film Junction Circulator*
H. How, ElectroMagnetic Applications, Inc., Boston, MA, S.W. McNight, C. Vittoria, ECE Dept., Northeastern Univ., Boston, MA