



2001 Microwave Symposium Technical Program Schedule

Session TU1A Techniques for System Level Nonlinear Analysis and Simulation

8:00–9:40 am

Ballroom

Tuesday, May 22, 2001

Chair: P. Draxler, Qualcomm, Inc.

Co-Chair: S. Kenney, Georgia Institute of Technology

TU1A-1	Analysis of CDMA Signal Spectral Regrowth and Waveform Quality	5
8:00 am	V. Aparin	
TU1A-2	Generalized Autocorrelation Analysis of Spectral Regrowth from Bandpass Nonlinear Circuits	9
8:20 am	K. Gard, M.B. Steer, and L.E. Larson	
TU1A-3	Application of Polyspectral Techniques to Nonlinear Modeling and Compensation	13
8:40 am	C.P. Silva, A.A. Moulthrop, M.S. Muha, and C.J. Clark	
TU1A-4	Estimation of Error Vector Magnitude Using Two-Tone Intermodulation Distortion Measurements	17
8:50 am	H. Ku and J.S. Kenney	
TU1A-5	Investigation of Behavioral Model Accuracy Using a State-Space and Convolution-Based Transient Simulator	21
9:00 am	A. Zhu and T.J. Brazil	
TU1A-6	Efficient Circuit-Level Analysis of Large Microwave Systems by Krylov-Subspace Harmonic Balance	25
9:20 am	V. Rizzoli, A. Lipparini, D. Masotti, and F. Matri	

Session TU1B

Power Combiners/Dividers and Directional Couplers

8:00–9:40 am

Room Tucson 36–38

Tuesday, May 22, 2001

Chair: C. Buntschuh, Microwave Engineering Services

TU1B-1	A Novel 3-Way Hybrid Combiner/Divider for High Power C-Class Microwave Amplifiers	31
8:00 am	M. Catoiu	
TU1B-2	A Novel Ka-Band 1 to 8 Power Divider/Combiner	35
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TU1B-3	A Low-Loss Serial Power Combiner Using Novel Suspended Stripline Couplers	39
8:20 am	Y. Tahara, H. Oh-hashii, T. Ban, K. Totani, and M. Miyazaki	
TU1B-4	A Compact Coaxial Waveguide Combiner Design for Broadband Power Amplifiers	43
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TU1B-5	Broadband Lumped-Element 180-Degree Hybrids Utilizing Lattice Circuits	47
8:50 am	T. Kawai, Y. Kokubo, and I. Ohta	
TU1B-6	Design of High Directivity Directional Couplers in Multilayer Ceramic Technologies	51
9:10 am	S. Al-taei, P. Lane, and G. Passiopoulos	

Session TU1C

Microwave Photonics

8:00–9:40 am

Room Tucson 40–41

Tuesday, May 22, 2001

Chair: P. Yu, University of California, San Diego

Co-Chair: E. Rezek, TRW

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8:20 am	G.L. Li, S.A. Pappert, C.K. Sun, W.S.C. Chang, and P.K.L. Yu	
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TU1C-6	Experimental Reduction of Dispersion-Induced Effects in Microwave/Millimeter-Wave Optical Systems Employing SOA Boosters	77
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Session TU1D Frequency Converters

8:00–9:40 am

Room Tucson 42–43

Tuesday, May 22, 2001

M. Madihian, NEC

Co-Chair: L. Reynolds, RF Micro Devices

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TU1D-3 8:20 am	A Highly Linear Single Balanced Mixer Based on Heterojunction Interband Tunnelling Diode A. Cidronali, G. Collodi, C. Toccafondi, M. Deshpande, N. El-Zein, G. Manes, V. Nair, and H. Goronkin	91	TU 2A
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Session TU1E Smart Antennas

8:00–9:40 am

Room Yuma 26–29, 31–34

Tuesday, May 22, 2001

Chair: M. Thursby, SkyCross, Inc.

Co-Chair: B. Perlman, CECOM

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Session TU1F

Biological Effects and Medical Applications

8:00–9:40 am

Room Yuma 21–23

Tuesday, May 22, 2001

Chair: J. Pribetich, University of Lille, France
Co-Chair: P. Yu, University of California, San Diego

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Session TU2A

Plenary Session

10:10 am–12:10 pm

Symphony Hall

Tuesday, May 22, 2001

Chair: S. El-Ghazaly, Arizona State University

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10:10 am	D.A. Roberson, CTO, Motorola Inc.	

Session TU3B

Baluns, Spiral Inductors and Resonators

1:20–2:50 pm

Room Tucson 36–38

Tuesday, May 22, 2001

Chair: A. Fathy, Sarnoff Corp.

Co-Chair: G. Ponchak, NASA Glenn Research Center

TU3B-1	Sandwich Type Ferromagnetic RF Integrated Inductor	185
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2:20 pm	G.-H. Ryu, D.-H. Kim, J.-H. Lee, and K.-S. Seo	
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2:30 pm	M.E. Tobar, E.N. Ivanov, J.G. Hartnett, and D. Cros	



Session TU3C

MEMS for Antenna Applications

1:20–2:50 pm

Room Tucson 40–41

Tuesday, May 22, 2001

Chair: S. Barker, University of Virginia

Co-Chair: T. Weller, University of South Florida

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Session TU3D Control Devices

1:20–2:50 pm

Room Tucson 42–43

Tuesday, May 22, 2001

Chair: M. Goldfarb, Analog Devices
Co-Chair: S. Brozovich, Filtronics Solid State

TU3D-1	Design of a Novel Digital Phase Shifter at X-Band	233
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1:30 pm	K. Miyaguchi, M. Hieda, K. Nakahara, H. Kurusu, M. Nii, M. Kasahara, and T. Takagi	
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Session TU3E Phased Array Antennas

1:20–2:50 pm

Room Yuma 26–29, 31–34

Tuesday May 22, 2001

Chair: K. Chang, Texas A&M University
Co-Chair: R. Sudbury, MIT Lincoln Laboratory

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1:40 pm	T.-Y. Yun and K. Chang	
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Session TU4A/TUE4A **(Joint IMS/RFIC Session)** **Low Noise Amplifiers (LNA's)**

3:30–5:00 pm

Ballroom

Tuesday, May 22, 2001

Chair: S. Lloyd, Conexant Co.
 Co-Chair: K. Ashby, Microtune Inc.

TU4A-1	A Wide Dynamic Range Switched-LNA in SiGe BiCMOS	281
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3:50 pm	E. Taniguchi, K. Maeda, T. Ikushima, K. Sadahiro, K. Itoh, N. Suematsu, and T. Takagi	
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Session TU4B **Innovative Structures**

3:30–5:00 pm

Room Tucson 36–38

Tuesday, May 22, 2001

Chair: J. Owens, Auburn University

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4:30 pm	K. Hettak, C.J. Verver, and M.G. Stubbs	
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Session TU4C

MEMS Control Circuits

3:30–5:00 pm

Room Tucson 40–41

Tuesday, May 22, 2001

Chair: C. Goldsmith, Raytheon Company
Co-Chair: C. Nguyen, University of Michigan

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Session TU4D

Acoustic Devices for Wireless Communications and Sensing

3:30–5:00 pm

Room Tucson 42–43

Tuesday, May 22, 2001

Chair: R. Weigel, University of Linz, Austria
Co-Chair: C.C.W. Ruppel, EPCOS, Munich, Germany

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4:50 pm	G.G. Fattinger and P.T. Tikka	

Session TU4E

Novel Antennas and Applications

3:30–5:00 pm

Room Yuma 26–29, 31–34

Tuesday, May 22, 2001

Chair: W. Shiroma, University of Hawaii and Manoa
Co-Chair: D. McQuiddy, Triquint, Inc.

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Session TUIF-1

(Joint RFIC-IMS Session) Interactive Forum

2:30–5:00 pm

Room Phoenix 11,12, 16–20

Tuesday, May 22, 2001

Chair: P. Okrah, Motorola

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