

PANEL SESSIONS

In addition to the regular Symposium, several MTT Technical Committees and other groups have arranged specialist panel sessions in areas related to the conference program.

MTT-S Technical Committees have arranged panel sessions to be held on Tuesday evening, June 15 and Thursday evening, June 17. The panel sessions are open to all Symposium Attendees.

There are two panel sessions on Tuesday, and two on Thursday.

Application of Microwave and Millimeter-Wave Low Noise Techniques

Sponsors: MTT-14, Technical Committee on Microwave Low Noise Techniques.
Date: June 15, 2000 - 2200 (Tuesday) Reunion EF
Organizer: Jesse J. Taub, Eaton Corporation, AIL Division, Melville, NY
Moderator: James J. Whelehan, Jr., Eaton Corporation, AIL Division, Melville, NY

Abstract

The panel session will describe the use of the latest low noise techniques in satellite communications, radio astronomy, remote earth sensing, radar, and electronic warfare. The discussion will emphasize the tradeoff between low noise figure and other system requirements such as dynamic range, power handling, intermodulation performance, cost, size and weight. Low noise techniques to be considered include cooled and uncooled GaAs FET and parametric amplifiers, tunnel diode amplifiers, millimeter-wave mixing using GaAs Schottky and Mott barrier diodes, monolithic FET amplifiers and diode mixers, Josephson mixers. A major goal of this panel discussion will be to help the user know when and where to use each of these techniques.

Panelists

Dr. Timothy Fong, TRW Defense and Space Systems, Redondo Beach, CA
Dr. Herman Okean, LNR Communications, Inc. Hauppauge, NY
Mr. Henry Paczkowski, Eaton Corp., AIL Division, Melville, NY
Dr. Sander Weinreb, National Radio Astronomy Observatory, Charlottesville, VA
Dr. James Wiltse, Georgia Institute of Technology, Atlanta, GA

Monolithic versus Miniature Hybrid MICs

Sponsors: MTT-6, Technical Committee on Microwave and Millimeter-Wave Integrated Circuits
Date: June 15, 2000 - 2200 (Tuesday) Reunion GH
Moderator: Mr. Bert E. Berson, Consulting in Technology, Los Altos, CA

Abstract

A large effort has been expended during the last few years towards the development of microwave monolithic circuits for a wide variety of applications. Progress has also been made, however, with miniature hybrid circuits which may offer distinct advantages over monolithic circuits. Based on the present state-of-the-art, the panel will address the possible advantages and disadvantages of both technologies with respect to performance, fabrication, cost, application, etc., and will explore what can be expected within the next five years.

Panelists

Dr. Erwin F. Belohoubek, RCA Laboratories, Princeton, NJ
Dr. Gailon E. Brehm, Texas Instruments, Dallas, TX
Dr. Masumi Fukuta, Fujitsu Laboratories, Kawasaki, Japan
Dr. Douglas W. Maki, Hughes Research Center, Torrance, CA
Dr. Karl Niklas, Watkins-Johnson Co., Palo Alto, CA
Dr. Raymond S. Pengelly, Plessey Research (Caswell) Ltd., Northants, England
Mr. Gary Policky, Avantek, Inc., Santa Clara, CA
Dr. Robert A. Pucel, Raytheon Research Division, Waltham, MA

Monolithic Millimeter-Wave Integrated Circuits

Sponsor: MTT-6, Technical Committee on Microwave and Millimeter-Wave Integrated Circuits
Date: June 17, 2000 - 2200 (Thursday) Reunion EF
Organizers: Mr. Derry Hornbuckle, Hewlett-Packard Co., Santa Rosa, CA
Dr. Douglas W. Maki, Hughes Aircraft Co., Torrance, CA
Moderator: Dr. Douglas W. Maki, Hughes Aircraft Co., Torrance, CA

Abstract

This panel session covers state-of-the-art developments in monolithic millimeter-wave integrated circuits and anticipated design approaches for future work. Short presentations by panelists will include discussion of available techniques for power generation, circuit configuration and fabrication. Questions, answers, and discussion from participants will follow the presentations.

Panelists

Dr. Lester F. Eastman, Cornell University, Ithaca, NY
Dr. Vladimir Sokolov, Honeywell, Minneapolis, MN
Dr. Alejandro Chu, M.I.T., Lincoln Laboratory, Lexington, MA
Dr. Jeffrey Paul, Hughes Aircraft Co., Torrance, CA
Dr. Martin Caulton, RCA Laboratories, Princeton, NJ
Dr. William R. Frenzley, Texas Instruments, Dallas, TX
Dr. C. C. Chang, Hewlett-Packard Co., Santa Rosa, CA

Technology Applications for Microwave Landing Systems

Sponsor: MTT-16, Technical Committee on Microwave Systems
Date: June 17, 2000 - 2200 (Thursday) Reunion GH
Organizer and Moderator: Mr. Seymour Everett, Federal Aviation Administration Washington, D.C.

Abstract

International standards for the microwave landing system (MLS) have been developed and the system is now moving into the implementation stage. The microwave technology is available to provide for cost-effective designs that will meet the system performance requirements. This panel will discuss various design techniques and options for the major elements of the ground system, including antennas, transmitters, and monitoring equipment.

Panelists

Mr. Douglas Vickers, Federal Aviation Administration, Washington, DC
Dr. J. Paul Shelton, Naval Research Laboratory, Washington, DC
Mr. Robert Kelly, Bendix Communications, Towson, MD
Mr. Al Lopez, Hazeltine Corp, Greenlawn, NY
Dr. Bevan Jones, Interscan Australia Pty. Ltd., Australia
Dr. Wei C. Tsai, Raytheon Co., Northborough, MA