Optical Millimeter-Wave Interactions: Measurements, Generation, Transmission and Control

July 24-26, 1991
Sheraton Newport, Newport Beach, CA

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This meeting will focus on the expanding role of optical lasers and electro-optics in millimeter-wave applications. Use of picosecond testing has become the major technique for evaluating the newest advances in high frequency semiconducting devices including FETs, HEMTs, and Heterojunction Bipolar transistors. Recently, these laser based, pulsed systems have also been used to generate millimeter waves and open up new forms of spectroscopy. Continuous wave lasers, in conjunction with mixing and high frequency modulators, have established an important role in the transmission and control of millimeter wave signals. In addition to reviewing the current technology, the meeting will examine the next stage in the development of optical millimeter-wave systems.

Invited Speakers:

S.Y. Wang, Hewlett-Packard Labs: "Progress in High-Speed Modulators"

Amnon Yariv, California Institute of Technology: "Modelocked Pulses from Semicondutor Lasers at Greater than 100 GHz Repetition Rates"

X.-C. Zhang, *Columbia University:* *"Generation of Submillimeter-Wave Pulses from Surfaces and Interfaces with Femotsecond Optics"*

Brian Hendrickson, Rome Laboratories: *"Application of Photonics to Microwave and Millimeter-Wave Systems"*

Kai Chang, Texas A&M University: *"Microwave-Optical Mixing and Harmonic Generation"*

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