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## **OPTICAL INTERACTION WITH MICROWAVE CIRCUITS—I (FOCUSED SESSION)**

**Chairman: Chi H. Lee—University of Maryland**

**Session Abstract:** The area of optical interaction with microwave circuits has become a hot topic. This is the first of two focused sessions in this area scheduled this afternoon. These sessions are intended as a forum for the exchange of ideas among those interested in this new area. The focused sessions consist of both invited and contributed papers. Optoelectronic techniques are utilized to perform time domain network analysis for MMIC. Noncontact waveform measurement of a high speed silicon circuit is demonstrated by using the picosecond photoelectronic scanning electron microscope. Internal and external electrooptic sampling are used for on-wafer s-parameter measurement to 100 GHz. Optical techniques are also used for phased array antenna applications. These techniques provide means of implementing components which would be difficult to build using conventional microwave techniques.

**2:00 p.m.—3:30 p.m., Tuesday, June 13, 1989**  
**California Room**