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## **SOLID STATE CIRCUITS**

**Chairman: Natalino Camilleri—Avantek**

**Session Abstract:** This session demonstrates recent developments in solid-state circuit concepts. In the oscillator area a broadband millimeter-wave vco is presented. In the doubler field a FET circuit with conversion gain is demonstrated. A monolithic 5-bit digital attenuator operating from dc to 1.6 GHz using MESFET technology is presented. In the mixer field an up-converter using a balanced HEMT configuration is demonstrated. Analysis of transient response for PIN diode limiter circuits is presented.

**4:00 p.m.—5:30 p.m., Thursday, June 15, 1989**  
**Center Theater**