

Session VII

Low Noise Millimeter Wave MMICs (Joint with IMS)

Chairman:

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This session highlights outstanding technological developments coupled with a strong applications orientation for low noise mm-wave MMICs. The session opens with a review paper summarizing InP-based mm-wave HEMT technology developments. This is followed by examples of the expanding application base for mm-wave MMICs. A comprehensive suite of mm-wave InP-based HEMT MMICs is presented. Next several application oriented results are presented, beginning with a 60 GHz HJFET for a wireless LAN. Followed by a exciting HBT implementation of a Ka-band LNA and an antenna application for GaAs HEMTs demonstrates excellent MMIC to MMIC uniformity over temperature. The session closes with two examples of W-band progress. An 89 GHz MMIC module for a radiometer is presented along with a description of noise modeling at W-band.

**8:30 a.m.–10:00 a.m., Tuesday, June 18, 1996
MCC 135**