Session CC

Millimeter-wave Integrated Circuits and Technology I

Chairman:

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This session deals with MMW oscillators and amplifiers. Progress continues in extending these sources to higher frequencies, wider bandwidths, and higher powers. Papers include results at 45 GHz and W-band, and the use of HEMTS in hybrid or monolithic circuits in several cases. One paper describes Gunn oscillators providing extremely wide tuning range (69-92 GHz) or improved spectral characteristics. The extreme bandwidth is applicable for electronic warfare systems, while several of the other presentations offer improved output characteristics in a configuration that is smaller and more lightweight than prior art. A monolithic, W-band two stage low noise amplifier employing pseudomorphic HEMTs provides about 15 dB gain with a noise figure of 5.5 dB from 91 to 95 GHz.

8:30 a.m.–10:00 a.m., Thursday, June 13, 1991
Ballroom A