SESSION 10: SYSTEMS

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Advances in microwave systems are taking place at the component, subsystem and overall system design levels with cost reduction providing a major driving force. Radar system developments emphasize increasing operating frequencies and resolution while in communication systems higher information densities and digital connectivity provide major goals. A number of specific advances are covered in topical sessions and the open forums of this symposium.

In this session both radar and communication systems are represented. The first paper discusses a short range radar which identifies digitally coded roadside markers for information processing on board the vehicle. The two communication papers present a digital radio design discussing individual components as well as overall error rate performance, and the design and performance of a receiver to be used on board a direct broadcast satellite. For an active phased array, the final paper describes a lightweight, low profile transmitting amplifier design.