

# **Session M**

## **Ferrite and Non-Reciprocal Semiconductor Devices**

**Chairman:**

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Several new and interesting concepts for ferrite and non-reciprocal semiconductor devices are presented. For ferrite phase shifters, results of a finite element CAD tool and an analytical study of a new double ridged geometry are given. A frequency selective YIG film limiter with broadband performance is described for microwave receivers. Two unique circulator concepts are suggested: a quasi-optical reflection circulator handling higher power for millimeter wave radar application and a semi-conductor device based on the permittivity tensor instead of the well-known permeability tensor experienced in ferrites.

**3:30 p.m.-5:00 p.m., Tuesday, June 15, 1993**  
**Room 218/219**

