# Abstracts

## Mutual Coupling Between Two Circular Waveguides Terminated in a Conducting Spherical Cavity

*P.K. Bondyopadhyay and A. Hessel. "Mutual Coupling Between Two Circular Waveguides Terminated in a Conducting Spherical Cavity." 1978 MTT-S International Microwave Symposium Digest 78.1 (1978 [MWSYM]): 336-337.*

The self and mutual admittances between two circular waveguide apertures in a conducting spherical cavity are formulated, from an expansion of the cavity field in terms of spherical waveguide modes. Two basic admittance functions are formed, one for the apertures polarized along the interconnecting great circle, (E-plane) and another crosswise to it. These mutual admittances have direct application to microwave network analysis of mutual coupling in spherical lens arrays on concave surfaces of the Dome Antenna type.

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