

# Abstracts

## Properties and Applications of the TM<sub>sub 11</sub>/Mode in Cylindrical Disk-Loaded Waveguide

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*O.H. Altenmueller, R.R. Larsen and G.A. Loew. "Properties and Applications of the TM<sub>sub 11</sub>/Mode in Cylindrical Disk-Loaded Waveguide." 1964 PTGMTT International Symposium Program and Digest 64.1 (1964 [MWSYM]): 38-41.*

Several laboratories in Europe and the United States have recently become interested in the TM<sub>sub 11</sub>/ mode in cylindrical disk-loaded waveguide. This interest has been stimulated by the realization that the TM<sub>sub 11</sub>/ mode exhibits interesting and useful properties when made to interact with charged particle beams. Whereas the TM<sub>sub 01</sub>/ mode in cylindrical disk-loaded waveguide has been used for years to give cumulative longitudinal interaction with an electron beam, as, for example, in traveling-wave tubes or linear accelerators, the TM<sub>sub 11</sub>/ mode is found to exert a transverse force on particles traveling along the direction of propagation.

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