# Abstracts

## Guided Waves in Moving Media (Jul. 1965 [T-MTT])

*J.R. Collier and C.T. Tai. "Guided Waves in Moving Media (Jul. 1965 [T-MTT])." 1965 Transactions on Microwave Theory and Techniques 13.4 (Jul. 1965 [T-MTT]): 441-445.*

This paper contains a theoretical study of the guided waves in a moving isotropic medium. The normal modes which can exist in a circular or rectangular wave guides are found by solving the Maxwell-Minkowski Equations subject to the appropriate boundary conditions. By certain transformations of field vectors, it is possible to change the Maxwell-Minkowski Equations into familiar forms such that the method of vector potentials can be applied to derive complete expressions for the field vectors. The results demonstrate that expressions for the propagation constant and the transverse-wave impedance and admittance in stationary media are modified by terms independent of the guide geometry when the media are moving.

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