

Abstracts

Action of a Progressive Disturbance on a Guided Electromagnetic Wave

J.-C. Simon. "Action of a Progressive Disturbance on a Guided Electromagnetic Wave." 1960 *Transactions on Microwave Theory and Techniques* 8.1 (Jan. 1960 [T-MTT]): 18-29.

A problem often encountered in wave physics concerns the interaction of various types of waves, and the energy transfer from one wave to another. In the particular case of waves of the same nature, "modes" can be distinguished in such a way that a wave can be represented as a sum of these modes. Their essential character is that the energy associated with each does not vary with time. It is also said that these modes are not "coupled." This, for instance, is the case of waves guided in an electric waveguide, of mechanical vibration in a bar, and of energy levels in quantum physics.

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