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Dispersion relations for a cylindrical waveguide with multilayer walls

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An algorithm for determining the eigenvalues of the eigenfunctions of a multilayer cylindrical waveguide is constructed. A relationship is found between dispersion relations and impedances. A method for determining the resonant frequencies of the wake field in the linear and helical motion of a particle is described. The damping coefficients of eigenmodes at resonant frequencies are determined.

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Footnotes

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Yes

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