

Elastodynamics Problems in Domains with Edges

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Basic initial-boundary value problems of elastodynamics are considered in a domain of general type with edges on the boundary, in particular, with cracks and conical points. The asymptotics of solutions near the singularities is obtained and justified. The coefficients in asymptotics (stress intensity factors) are expressed in terms of special solutions to the homogeneous problem. Properties of the coefficients are discussed; among others, some phenomena related to the property of finite propagation speed.

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