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The short-wave asymptotics for the solution of the point-source problem in an inhomogeneous moving medium. (Russian. English summary) [Zbl 0553.76070](#)

Zap. Nauchn. Semin. Leningr. Otd. Mat. Inst. Steklova 140, 41-48 (1984).

An unbounded inhomogeneous unrotated moving medium with constant entropy is investigated. The principal term of the short-wave asymptotics of the point source problem solution is obtained in a small neighbourhood of the source as well as a formula for the detecting coefficient of the wave in the domain, where the ray representation is valid. The results are valid for a slightly rotated medium with small current velocity.

MSC:

[76Q05](#) Hydro- and aero-acoustics

[86A05](#) Hydrology, hydrography, oceanography

Cited in 1 Review

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constant entropy; short-wave asymptotics; ray representation

Full Text: [EuDML](#)