

VARIATIONAL MAXIMUM PRINCIPLE IN CONTROLLED SYSTEMS OF MULTI-DIMENSIONAL HYPERBOLIC EQUATIONS ¹

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A problem of optimal control over hyperbolic systems of first-order multi-dimensional differential equations with distributed control is considered. Basing on multi-dimensional analogues of the Riemann invariants first introduced in papers [1,2] a necessary optimality condition in form of variational maximum principle is obtained. One-dimensional version of this optimality condition for semi-linear hyperbolic systems was published in paper [3].

REFERENCES

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3. V. A. Terletskii *Generalized solution of optimal control problems for hyperbolic systems.* — Russian Mathematics, 2007, Volume 51, Issue 4, pp 65-75.

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