

On Compatibility of Overdetermined Systems of double waves

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Abstract. An obtaining of equations for double waves in case of general quasilinear system of partial differential equations has big difficulties. They are connected with complexity and awkwardness of study of overdetermined systems, describing solutions of this class. However there are general statements about double waves of autonomous quasilinear system of equations. This article is devoted to classification of irreducible double waves of autonomous nonhomogeneous systems.

Key words: Partially invariant solutions, degenerate hodograph, multiple waves, double waves.

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¹Full Lie group admissible by system (1) can be wider than G^n (or G^{n+1}).