

CONSERVATIVE GRID-CHARACTERISTIC METHODS FOR EQUATIONS OF HYPERBOLIC CONSERVATION LAWS

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A new CFD method is proposed. The new method combines the advantages of grid-characteristic schemes and conservative schemes. Such unification became possible when using a new type of computational grids - the so-called G-grids. G-grids contain two types of variables. The first type is conservative variables related to the centers of the calculated cells. The second type is the flux-type variables related to the faces of the calculated cells. To calculate new conservative variables, a finite volume method is used. To calculate the flux - type variables, the grid-characteristic method. Examples of calculations are given