

Low Velocity Flows



ID de Contribution: 1

Type: Non spécifié

Godunov type schemes for low Froude flows with Coriolis force

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in this talk, we are interested in the numerical simulation of free surface geophysical flows. Our objective is to study the relation between two well known categories of numerical schemes: the well-balanced schemes that are designed to preserve some stationary states of the model and the low Froude number schemes that are designed to remain accurate in some asymptotic regime. We study two particular cases that are related to the presence of topography and Coriolis source terms. More particularly we analyze the linearized system in order to identify the kernel of the associated operator and to derive stable and accurate numerical schemes.

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