



## Wave Processes in Fluids with Symmetric Density Stratification

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### Message from the Guest Editor

Dear Colleagues,

Internal gravity waves are one of the most important components of wave motions in stratified media. They arise and propagate at the interfaces of layers of different densities in a stratified fluid. The dynamics of internal waves has been studied quite well for two-layer stratification, and a large number of research articles have recently appeared devoted to studies of wave dynamics in a three-layer fluid, where more complex and interesting dynamic regimes can be observed.

A special issue is devoted to the description of wave processes in stratified fluids with a symmetric in vertical (with respect to mid-depth) distribution of density and / or shear flow, both layered and with continuous laws of density and flow velocity variations in depth. Such fluid configurations are specific because when described within approximate asymptotic models, symmetry leads to degeneration of nonlinearities...





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## Editor-in-Chief

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## Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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