Nonlinear resonance gas oscillations in a flat open-ended channel

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Abstract

The resonance gas oscillations in a flat channel are considered; the oscillations are excited by a piston at the inlet and the outlet section is connected with the ambient medium. The boundary condition at the open end is calculated analytically; the dependences of the gas oscillation amplitude on the frequency and geometric parameters of the open end at different values of the frequency parameter are obtained. © Allerton Press, Inc. 2008.