Resonance oscillations of a gas in an open-end pipe in the turbulent regime

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Abstract

Consideration has been given to the theory of oscillating flows in a pipe for the case where turbulence develops monotonically, reaching the pipe axis within a certain period of time after the beginning of acceleration. A mathematical model describing resonance oscillations of this type in an open pipe and consistent with experiment has been constructed. © 2004 Plenum Publishing Corporation.