

# APPROBATION OF THE NUMERICAL MODEL OF ACCOUNT OF VISCOSITY IMPACT ON THE FLOW IN LOW-THRUST ROCKET ENGINE NOZZLES IN THE APPROXIMATION OF A LAMINAR BOUNDARY LAYER WITH SLIDING

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The paper outlines the results of approbation of the numerical model developed in [1] of the account of viscosity impact on the flow in low-thrust rocket engine nozzles in the approximation of a laminar boundary layer with sliding by comparing the results of calculations according to the model both with the experimental results and with the results of calculations using a model of a higher level (shortened Navier-Stokes equations in the approximation of a narrow channel).

*Laval nozzle, Reynolds number, experiment, numerical calculation, dimensionless density profile, Mach number profile, consumption factor, nozzle specific impulse loss factor.*

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