

DIRECT NUMERICAL SIMULATION OF TURBULENT MIXING

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Abstracts

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A review of the turbulent mixing (TM) studies performed mainly in VNIIEF using direct numerical simulation is presented in the report.

The turbulent flows occurring due to the presence of the main instability types such as the gravitational, shock-wave and shear ones are considered. The issues of code development for direct simulation are not discussed in this review; it is devoted to the physical aspects of the turbulent flow simulation. All the studies considered were conducted using the EGAK code for 2D simulation and the TREK code – for 3D simulation.