

Poster 1

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## **Experimental study into the initial perturbation spectrum influence upon the delay of the turbulent mixing evolution in systems with transitional layers**

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Results of experimental study into influence of the spectrum of the initial perturbations that were generated in the middle of the transitional layer upon the Rayleigh-Taylor turbulent mixing evolution are presented. In the experiments there were used mutual soluble liquids with different ratios of densities. The transitional layer with continuous distribution of density formed in the region of the contact boundary of liquids owing to molecular diffusion. Dependence of the mixing fronts coordinates on parameter  $g_1 t^2$  was determined in the experiments. It was shown the influence of the initial perturbation spectrum upon the turbulent mixing evolution delay.