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Rayleigh-Taylor turbulence in presence of stratification¹ LUCA BIFERALE, MAURO SBRAGAGLIA, ANDREA SCAGLIARINI, Dept. Physics, University Tor Vergata Roma, FEDERICO TOSCHI, Technische Universiteit Eindhoven — We present numerical results on 2 dimensional Rayleigh-Taylor turbulence in presence of density stratification, up to Atwood =0.4. Numerical algorithm is based on a fully consistent Thermal Lattice Boltzmann code for an ideal gas. We study both how the mixing layer depends on stratification and small-scale temperature, density and velocity fluctuations, confirming a Bolgiano scaling scenario for two dimensional RT turbulence.

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