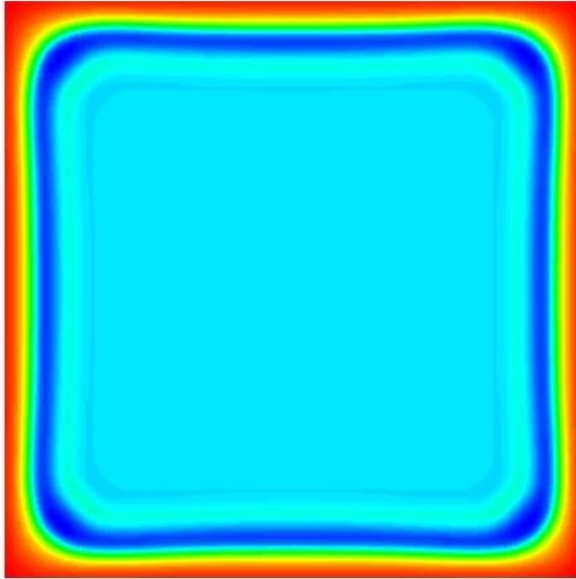
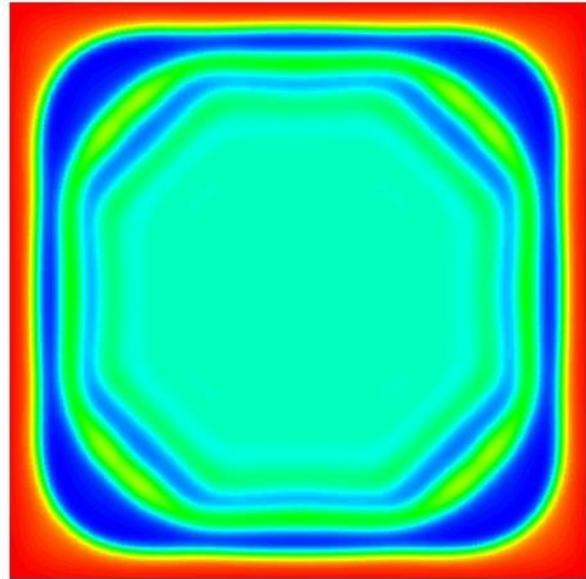


ADIABATICALLY INDUCED SPINODAL DECOMPOSITION ARCOFLUID CONSULTING LLC

From the dynamic van der Waals theory of Onuki (PHYSICAL REVIEW E **75**, 036304 _2007) starting with entropy and energy functional with gradient contributions. The resultant hydrodynamic equations contain the stress arising from the density gradient. It provides a general scheme of two-phase hydrodynamics involving the gas-liquid transition in non-uniform temperature. Some complex hydrodynamic processes with evaporation and condensation are examined numerically. We have looked first to adiabatically induced spinodal decomposition. Here after are results obtained through the numerical simulations of the Korteweg equations.



$t/t_0=500$



1000

