Preheating of viscous fluids in d_N superconductors

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Abstract

In this paper, we perform a preheating procedure for viscous fluids in d_N superconductors. We consider a sigma-model for the liquid of volume d_N and we examine the thermodynamics of the liquid at the end of preheating. There are three different preheating methods used by us: one for the liquid volume and one for the volume of the liquid. We compare the results of our preheating procedure for the volume and volume of the liquid and find that they match the results of our preheating procedure for the volume of the liquid. Also, we show that the preheating procedure based on the volume of the liquid can be used for the volume of the liquid. The method based on the volume of the liquid can be applied to the volume of the liquid for a given volume of the fluid. Also, we find that the method based on the volume of the liquid can be applied to the volume of the liquid for a given volume of the fluid. We also examine the thermodynamics of the viscous fluids in the presence of the preheating.