

Thermal Instability in Interstellar medium

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We have investigated the propagation of a shock wave into an interstellar medium by hydrodynamical simulations with radiative heating/cooling, thermal conduction, and physical viscosity. We find that the thermal instability in the post-shock medium produces high-density cloudlets which have a supersonic velocity dispersion. The dynamical evolution driven by thermal instability in the post-shock layer becomes important for the transition from warm gases to cold gases, because the shock waves are frequently generated by supernovae in the Galaxy.