



Radiative Cooling and Kelvin-Helmholtz Instability in Astrophysics

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In this paper, the influence of radiative cooling on the Kelvin-Helmholtz Instability (KHI) is studied in the context of astrophysical jets. As expected, cooling modifies the spatial structure plus time evolution of the system and an additional instability takes place, namely, the so-called thermal instability that occurs in gravitational collapses, for instance. For jets, this instability may explain the heterogeneous structure evidenced in astronomical observations and can be at the origin of the knots (overdensity regions) spread out along the symmetry axis of the jet.