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## **Adiabatic Media Inflation**

We study a class of models where inflation is driven by a self-gravitating adiabatic medium. Such class of media admits an effective description in terms of four scalar fields related to the Goldstone bosons for the spontaneous breaking of spacetime translations. Depending on the symmetry of the effective action of the medium, one can have perfect barotropic or non-barotropic fluids and solids. In particular, we reconsider and extend the previous results on fluid and solid inflation, studying in detail the effect of entropic perturbation, which can be present even if the medium is adiabatic, and the violation of the Weinberg theorem which manifests with the growing of curvature perturbation calR at superhorizon scales and its offset with the curvature of uniform density hypersurfaces  $\zeta$ . Such offset makes essential the study of reheating showing that the  $\zeta$ is typically continuous during such a phase. The presence of entropic perturbation in a adiabatic medium can boost the ratio of scalar to tensor ratio, making such class of models rather

interesting from a phenomenological point of view.

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