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Completely Stabilizing the Interface in a Rayleigh-Taylor Problem by Heating¹ RANGA NARAYANAN, LEWIS JOHNS, University of Florida — The interface in a Rayleigh-Taylor problem can be stabilized to perturbations of any wavelength by merely heating. We present a simple formula for estimating the temperature difference required to do this. We assume that the fluid resides in a porous medium so as to simplify the algebraic manipulations and to avoid surface tension gradients.

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