

Abstract Submitted  
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**Detailed study of fluid flow in a stably stratified square lid-driven cavity** BRUNO WELFERT, KE WU, JUAN LOPEZ, Arizona State University —  
A detailed numerical investigation of the fluid flow in a square lid-driven cavity with stable temperature stratification in a comprehensive range of Reynolds and Richardson parameter values is presented (with  $Prandtl=1$ ). Special attention is given to bifurcation mechanisms of the base steady state. Frequency analyses reveal an intricate pattern of responses when buoyancy and inertial effects compete.

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