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A Stratified Fluid in the Presence of a Moving Wall: Exact Solutions and their Stability MATTHEW MOORE, ROBERTO CAMASSA, RICHARD MCLAUGHLIN, SORIN MITRAN, ASHWIN VAIDYA, LONGHUA ZHAO, University of North Carolina - Chapel Hill — We present an exact solution for a moving wall in the presence of an unstable density stratification. We discuss the linear stability of the system through the analysis of the associated Orr-Somerfeld type eigenvalue problem. Time permitting, full simulations of the nonlinear system based on pseudospectral projection methods will be presented.

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