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Milena Stanislavova*, Department of Mathematics, University of Kansas, 405, Snow Hall,
Lawrence, KS 66045. *Stability of traveling waves in two water wave models.*

We consider the linear stability of traveling wave solutions for the subsonic waves in the Benney-Luke equation and the Boussinesq ‘abc’ system. We use two recently developed abstract stability criteria to provide a complete rigorous characterization of the linear stability and instability regions. We discuss the applicability of each tool for certain types of equations. (Received September 21, 2012)