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Christopher J Winfield* (cjwinfield01@alaska.edu), Dept. of Mathematics and Statistics,
University of Alaska Fairbanks, P.O. Box 756660, Fairbanks, AK 99775. *Continuum Eigenmodes in
Some Linear Stellar Models*. Preliminary report.

We apply parallel approaches in the study of continuous spectra to adiabatic stellar models. We seek continuum eigenmodes for the Linear Adiabatic Wave Equation (LAW) in both finite difference and linear differential equations. In particular, we apply methods of Jacobi matrices in finite difference equations and methods of subordinacy theory in ordinary differential equations. We find certain pressure-density conditions which admit positive-measured sets of continuous oscillation spectra under plausible conditions on density and pressure. We arrive at cases of unbounded oscillations and computational or, perhaps, dynamic instability. (Received September 01, 2015)