1041-35-206   **Katie L Oliveras*** (`oliveras@amath.washington.edu`), University of Washington, Dept. of Applied Math, Box 352420, Seattle, WA 98195-2420, and **Bernard Deconinck**. *Stability of One-dimenstional Water Waves.* Preliminary report.

We extend Viswanath's numerical Lindstedt-Poincare method to apply to nonlocal equations. This allows us to construct solutions of the one-dimensional Euler equations using the formulation of Ablowitz, Fokas, and Musslimani. The spectral stability of these solutions is examined using Hill's method. (Received August 11, 2008)