

Meeting: 1001, Evanston, Illinois, SS 14A, Special Session on Nonlinear Waves

1001-35-58 **Borys Alvarez*** (balvarez@math.uic.edu), Department of Mathematics, U.I.C., 322 SEO, m/c 249, 851 S. Morgan St., Chicago, IL 60607-7045, and **Jaime Angulo**. *Existence and stability of periodic travelling-wave solutions of the Benjamin equation*. Preliminary report.

Let \mathcal{H} denote the periodic Hilbert transform and let l be a real number. A proof of the existence and nonlinear stability of real even periodic travelling-wave solutions for the Benjamin equation, $u_t + uu_x + u_{xxx} + l\mathcal{H}u_{xx} = 0$, is presented.

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