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**Vera Mikyoung Hur\*** (verahur@math.uiuc.edu), 1409 W Green Street, University of Illinois at Urbana-Champaign, Department of Mathematics, Urbana, IL 60801. *On the modulational instability for the Benjamin-Ono equation.*

I will discuss the modulational stability and instability for a class of nonlinear dispersive equations, involving nonlocal dispersion operators, such as the Benjamin-Ono equation. In case the equation is equipped with Hamiltonian structure and thus periodic traveling-wave solutions arise as critical points of a constrained Hamiltonian, I will explain how the traditional Evans function based approach can be related to direct Bloch wave expansions. I will also make a connection of the spectral analysis to the Whitham's theory. This is joint work with Jared Bronski. (Received September 22, 2011)