1077-76-705 **Shu-Ming Sun*** (sun@math.vt.edu), Department of Mathematics, Virginia Tech, Blacksburg, VA 24061. *Stability of Solitary Waves on Water of Finite Depth.*

The talk will discuss recent development on the stability of two- and three-dimensional solitary waves on the surface of water with finite depth using various model equations or exact Euler equations. It was known that these equations have solitary-wave solutions and the stability of these waves in many problems is still open. Here, some stability results for these waves will be addressed, such as transverse instability, conditional stability or asymptotic linear and spectral stability. (Received September 10, 2011)