1023-35-1362

Muhammad Usman (usmanm@email.uc.edu), Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221-0025, and Bing-Yu Zhang\* (bzhang@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221-0025. Time Periodic Solution of the Korteweg-de Vries Equation on a Bounded Domain and Its Stability. Preliminary report.

In this talk we discuss the Korteweg-de Vries equation posed on a finite interval with time periodic boundary forcings. It will be demonstrated that if the amplitude of boundary forcings are small, then the system admits a unique time periodic solution. Moreover it will be shown that this time periodic solution is exponential stable. (Received September 25, 2006)