1011-35-241   **Lionel Rosier**, Institut Elie Cartan, Université Nancy I, B.P. 239, 54506 Vandœuvre-lès, Nancy, France, and **Bingyu Zhang*** (`bzhang@math.uc.edu`), Departmental of mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221. *Global Stabilization of the Generalized Korteweg-de Vries Equation Posed on a Finite Domain.*

This paper is concerned with the internal stabilization of the generalized Korteweg-de Vries equation on a bounded domain. The global well-posedness and the exponential stability are investigated when the exponent in the nonlinear term ranges over the interval $[1, 4)$. The global exponential stability is obtained whatever the location where the damping is active, confirming positively a conjecture of Perla Menzala, Vasconcellos and Zuazua. (Received August 29, 2005)