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Muhammad Usman* (musman1@udayton.edu), 300 College Park, Dayton, OH 45469-2316, and **Nicholas Haynes, Kamel Al-khaled** and **William Schiesser**. *A numerical study of eventual periodicity of the Korteweg-de Vries type equation using sinc collocation method*. Preliminary report.

We demonstrate numerically the eventual time periodicity of solutions to the Korteweg-de Vries equation with periodic forcing at the boundary using the sinc-collocation method. This method approximates the space dimension of the solution with a cardinal expansion of sinc functions, thus allowing the avoidance of a costly finite difference grid for a third order boundary value problem. The first order time derivative is approximated with a θ -weighted finite difference method. The sinc-collocation method was found to be more robust and more efficient than other numerical schemes when applied to this problem. (Received January 21, 2015)