1037-35-14 Gideon Pyelshak Daspan* (gdaspan@xula.edu), Xavier University of Louisiana, Department of Mathematics, New Orleans, LA , and Michael Mudi Tom. Comparison of KP and BBM-KP Models.

In this paper, we show that the solutions of the pure initial-value problem for the KP and regularized KP equations are the same, within the order of accuracy attributable to either, on the time scale $0\,8804$; $t\,8804$; 8722; 3/2, during which nonlinear and dispersive effects may accumulate to make an order-one relative difference to the wave profiles. (Received November 12, 2007)