

1035-76-941

Jeongwhan Choi* (jchoi@korea.ac.kr), Sunngbuk gu Anamdong 5-1, Korea University, Department of Mathematics, Seoul, 136-701, South Korea, and **Sungim Whang** (whang@korea.ac.kr), Sungbukgu Anamdong 5-1, Korea University, Department of Math., Seoul, 136-701, South Korea. *On the stability of KdV equation with negative forcing.*

KdV equation with forcing is derived for the fluid motion passing over an obstruction. In this papaer, we consider the case that an idea fluid flow passing over an hump on the rigid bottom. KdV equation with negative forcing is derived and four types of time independent soliton-like solutions are found according to the perturbaion of horizontal speed at far upstream. Two of the solutions are symmetric and the other two are unsymmetric. Stability of such soulutions are studied numerically. We also found critical speed for generation of solitary wave. (Received September 17, 2007)