1057-76-191 Jeongwhan Choi* (jchoi@korea.ac.kr), Dept. of Math., Korea University, Seoul, South Korea, and SungIm Whang, Shu-Ming Sun, Dal-Soo Lee and Sangho Oh. Supercritical surface waves generated by a positive forcing - Theory and Experiments.

Two dimensinal surface waves of an inviscid and incompressible fluid of constant density are studied. A forced KdV equation is derived when the horizontal speed at far upstream is near a critical number. We study the equation theoritically and numerically. Experiments corresponding to some numerical solutions are also carried out. (Received January 22, 2010)