

1011-35-85

Zhijun George Qiao* (qiao@utpa.edu), Departemnt of Math, UTPA, 1201 W Univ Dr,
Edinburg, TX 78541. *Shallow water equation on a symplectic submanifold and
solutions*. Preliminary report.

In this talk, I will present the shallow water equation - Camassa-Holm (CH) equation on a symplectic manifold, which is determined by some constraint between eigenfunctions and potential functions. New algebraic-geoemtric solution and new traveling wave solutions are obtained for the CH equation. (Received August 16, 2005)