1023-76-487   **Min Chen*** (`chen45@purdue.edu`), Dept. of Math, Purdue university, West Lafayette, IN 47906.
Numerical investigation of three-dimensional water waves. Preliminary report.

In this talk, the three-dimensional water waves will be studied by numerically simulating the solution of a Boussinesq system. An efficient and accurate numerical scheme is used on the Boussinesq system with physically relevant boundary conditions. Several physical relevant simulations, such as two-dimesional doubly periodic wave patterns and waves from a rectangular source, will be performed and the result will be analyzed. (Received September 14, 2006)