

1086-35-1182

Jennifer Beichman* (jbeich@umich.edu). *New decay estimates for a class of 1D dispersive PDE and applications to the 2D water wave problem.* Preliminary report.

The water wave problem in 2D reduces to a 1D problem on the interface which acts like a dispersive PDE in some sense. From this starting point, I will present joint work with Sijue Wu deriving decay estimates for a class of 1D dispersive PDE including the water wave case, with precise applications to the existence for the solutions of the 2D water wave problem. (Received September 19, 2012)