

1077-35-506

Pierre M Germain*, pgermain@cims.nyu.edu. *Global existence for water wave equations.*

I will present results giving global existence and scattering for two fundamental water wave models (gravity and capillary waves) if the data are small. The proofs rely on the method of space-time resonances, which I will illustrate. I will also discuss the resonant structure of more general models. This is joint work with N. Masmoudi and J. Shatah. (Received September 06, 2011)