ON TWO DIMENSIONAL GRAVITY WAVES

Nino Khatiashvili

I. Vekua Institute of Applied Mathematics of Iv. Javakhishvili Tbilisi State University e-mail: ninakhatia@gmail.com

The problem connected with 2D periodic gravity waves on a deep water is investigated. The corresponding mathematical problem for a free boundary is studied and reduced to the nonlinear integral equation. The approximate non-smooth solution is obtained and the profile of the wave is constructed by means of Maple.