ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

11. Mathematical Physics

1991 MS Classification: 76

Asavanant, Jack, Chulalongkorn University, Thailand

Free-surface flows past a rectilinear object with stagnation points

Two-dimensional free-surface potential flow past a rectilinear object in water of finite depth is considered. The object is modelled as a flat-bottomed body with inclined faces. Gravity is included in the dynamic boundary condition. It is assumed that the intersections of the free surface with the object are stagnation points. Numerical solutions are obtained by a series truncation procedure when the flow is supercritical in the far field. It is found that there is a two-parameter family of splashless solutions.