

On the motion of pendula in incompressible viscous fluids: A numerical approach

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Recently, experimentalists have been using pendula to investigate wall/particle collisions. The main goal of this lecture is to discuss the application to pendula moving and interacting in an incompressible viscous fluid, of the computational methodology developed by the authors and collaborators for the direct numerical simulation of particulate flow. A particular attention will be given to pendulum/wall and pendulum/pendulum collisions in two dimensions. The results of many numerical experiments will be presented.

This is joint work with H. Juarez, UAM, Mexico.