CONFINED PROPERTIES OF A FLOATING BALL IN WATER FLOW

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Abstract

A floating ball in water flow remains confined under a certain condition. This property is based on Bernoulli's principle in fluid mechanics. The phenomenon should be explained clearly using classical or Newtonian mechanics of point mass and fluid with gravitational and electromagnetic interaction, since for we can neglect relativity or quantum effects. In this article, we shall propose a mathematical model of the phenomenon, and consider mechanism of stability for such a ball. The results of consideration claims that a floating ball remains confined in water flow if there is friction on the surface of the ball and the amount of water flow is appropriate.