

Modeling of the Cavitation by Bubble around a NACA0009 Profile

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Abstract : In this study, a numerical model was developed to predict cavitation phenomena around a NACA0009 profile. The equations of the Rayleigh-Plesset and modified Rayleigh-Plesset are used to modeling the cavitation by bubble around a NACA0009 profile. The study shows that the distributions of pressures around extrados and intrados of profile for angle of incidence equal zero are the same. The study also shows that the increase in the angle of incidence makes it possible to differentiate the pressures on the intrados and the extrados.

Keywords : cavitation, NACA0009 profile, flow, pressure coefficient

Conference Title : ICHP 2018 : International Conference on Hydraulics and Pneumatics

Conference Location : Paris, France

Conference Dates : July 19-20, 2018