

Motion of Vortices near Plane Boundaries

Aye Aye Tint^{1*}

Lai Lai Phyo², May Thet Phuc³, Naw Wah Wah Khaing⁴,

Theint Thu Zar Moe⁵, Zin Zin Hlaing⁶

*Corresponding author

(1) Dr., Associate Professor, Department of Mathematics, Maubin University

(2-6) Tutor, Department of Mathematics, Maubin University

Abstract

In this paper, motion of vortices near plane boundaries is considered by using the method of complex variables. Firstly, two-dimensional fluid motion and the important theorems on vortex motion are discussed. Then the interaction between the systems of vortices and the image system of a vortex in a boundary are studied. Finally, motion of vortices between parallel plane boundaries is investigated.