

Homework #4
(Panel Methods)

Design your own Joukowski airfoil with thickness and camber.

At the angle of attack of 2, 5, 10, 15 and 30 degrees, using the panel method, get the solution for the flow around your airfoil.

1. Draw streamlines around the airfoil
2. Plot the distribution of pressure coefficient C_p
3. Calculate the lift coefficient and compare it with the theory
4. Discuss the effect of panel design on the results