

F19. Determine the C_p variation along the $-x$ and $+y$ directions for

- a) Freestream V_∞ with source of strength Λ
- b) Freestream V_∞ with vortex of strength Γ
- c) Freestream V_∞ with doublet of strength κ .

At large distances, where does a lifting airfoil cause the strongest disturbance to the flow (as measured by C_p), above and below, or fore and aft? Explain.