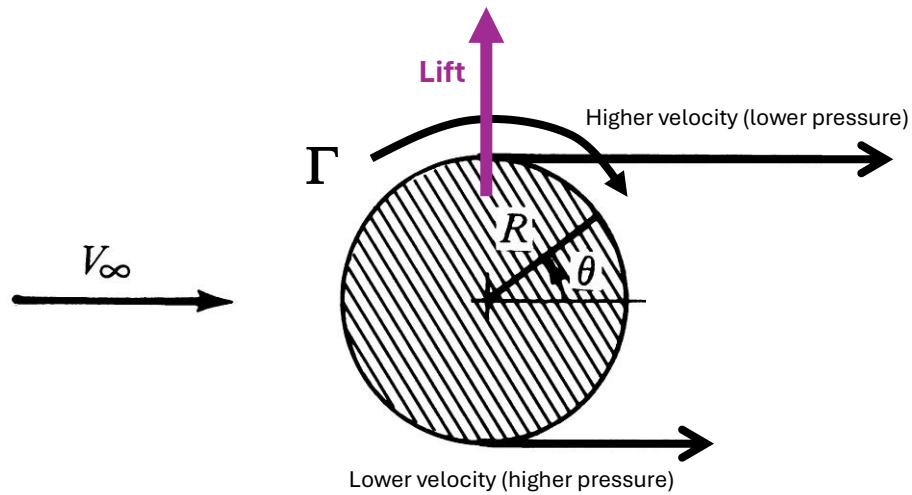


### (EXAMPLE) [B-4-1]



Consider the lifting flow over a circular cylinder. Based on the potential flow analysis, derive the relationship between lift coefficient ( $c_l$ ) and circulation ( $\Gamma$ ).

(HINT) (EQUATION) [B-3-10] shows step-by-step procedure to calculate lift coefficient by integrating surface pressure coefficient.

$$C_p = -\frac{1}{2} \int_0^{2\pi} C_p \sin \theta d\theta$$

Lined area for notes, consisting of multiple horizontal dashed lines.