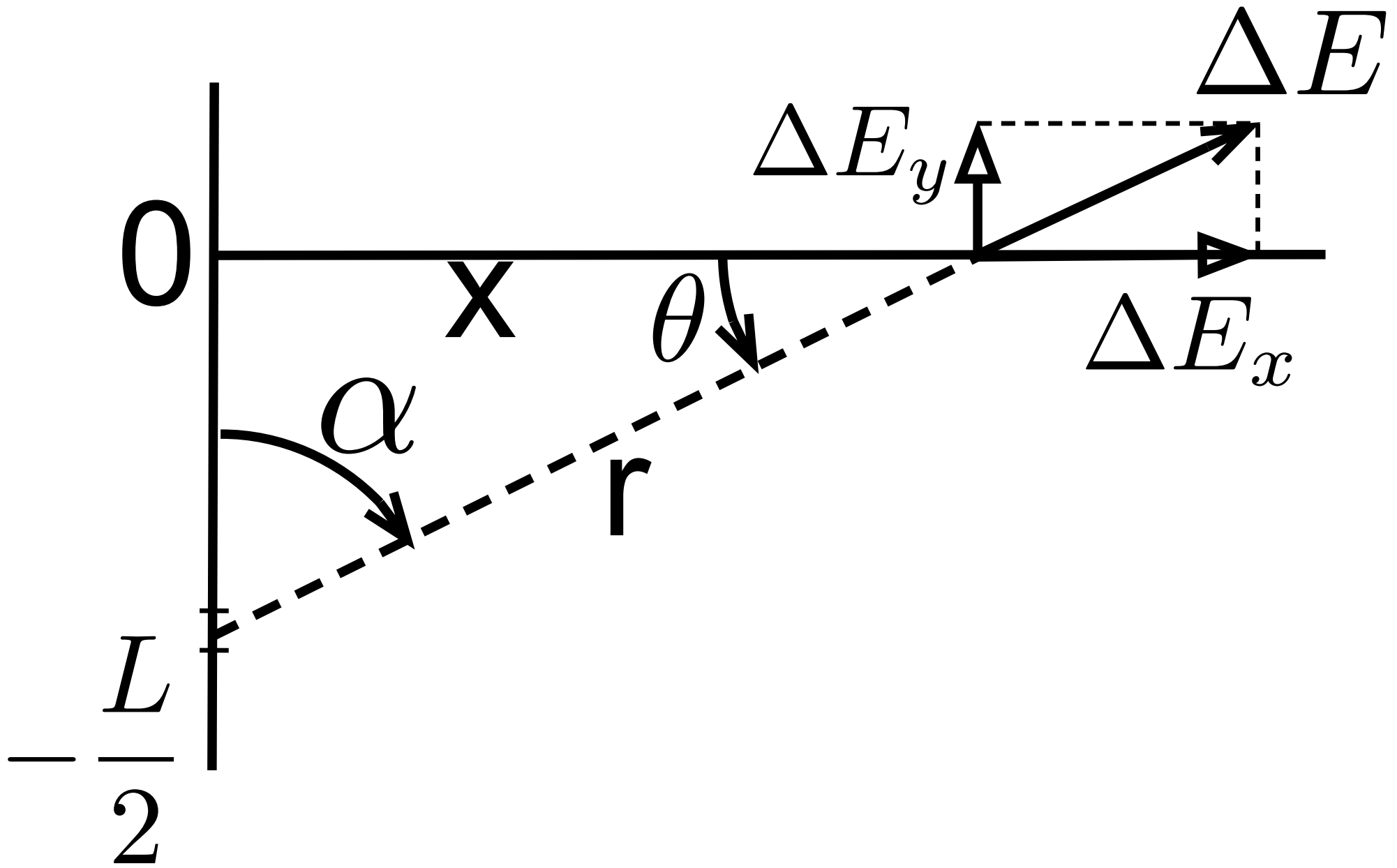
ΔE
ΔE_y
0
x
θ
ΔE_x
α
r
$-\frac{L}{2}$