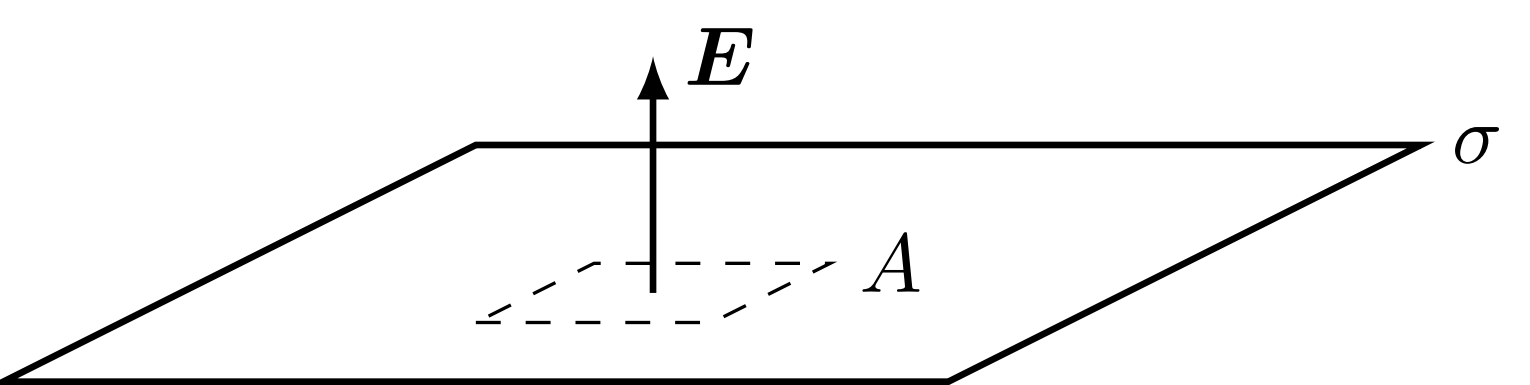
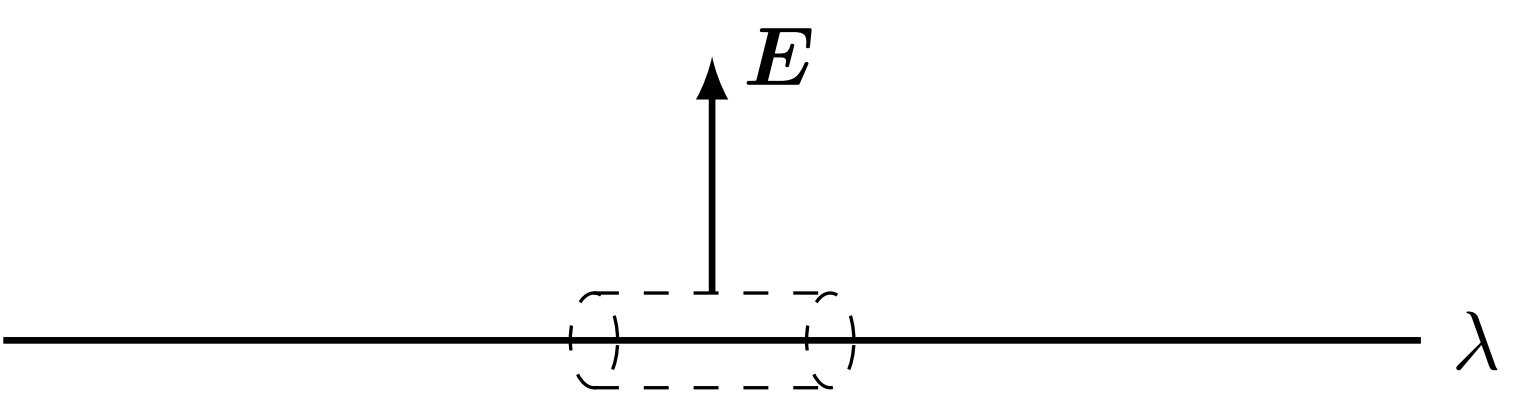
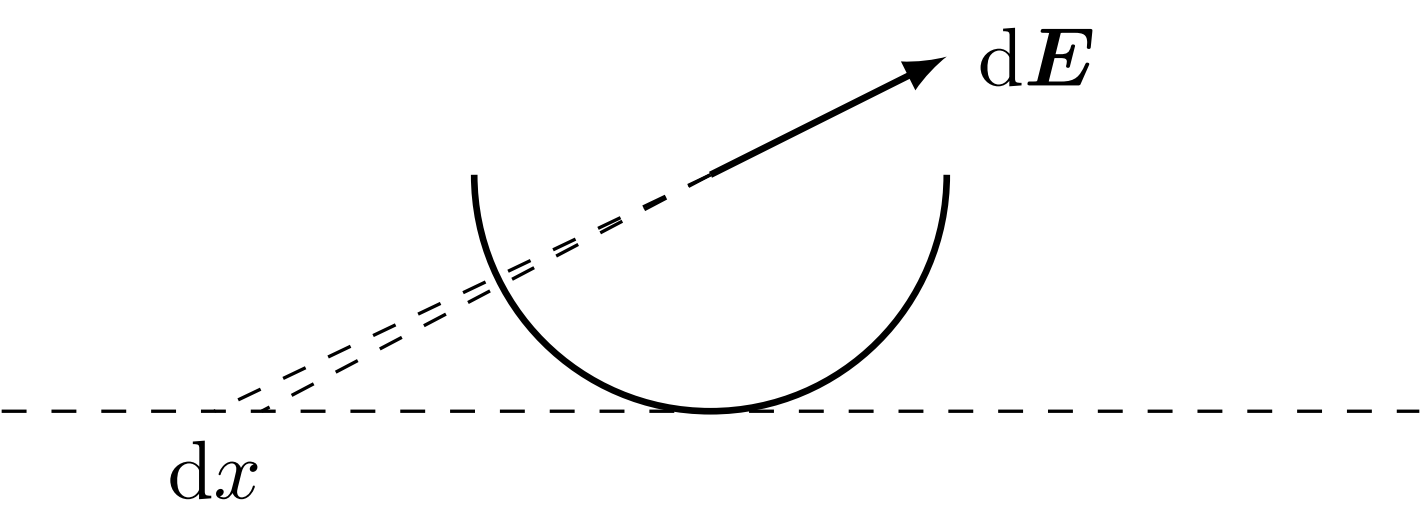
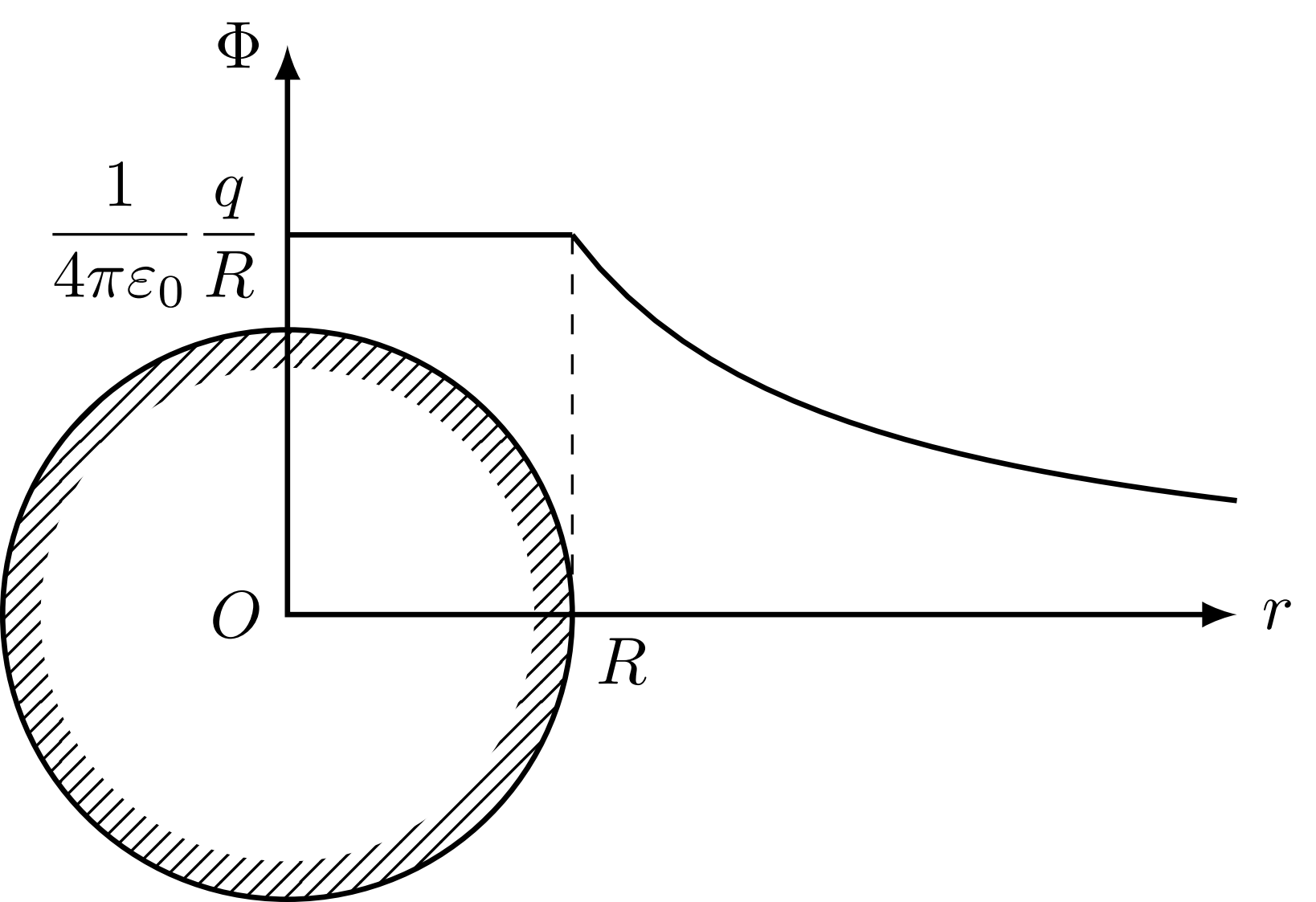
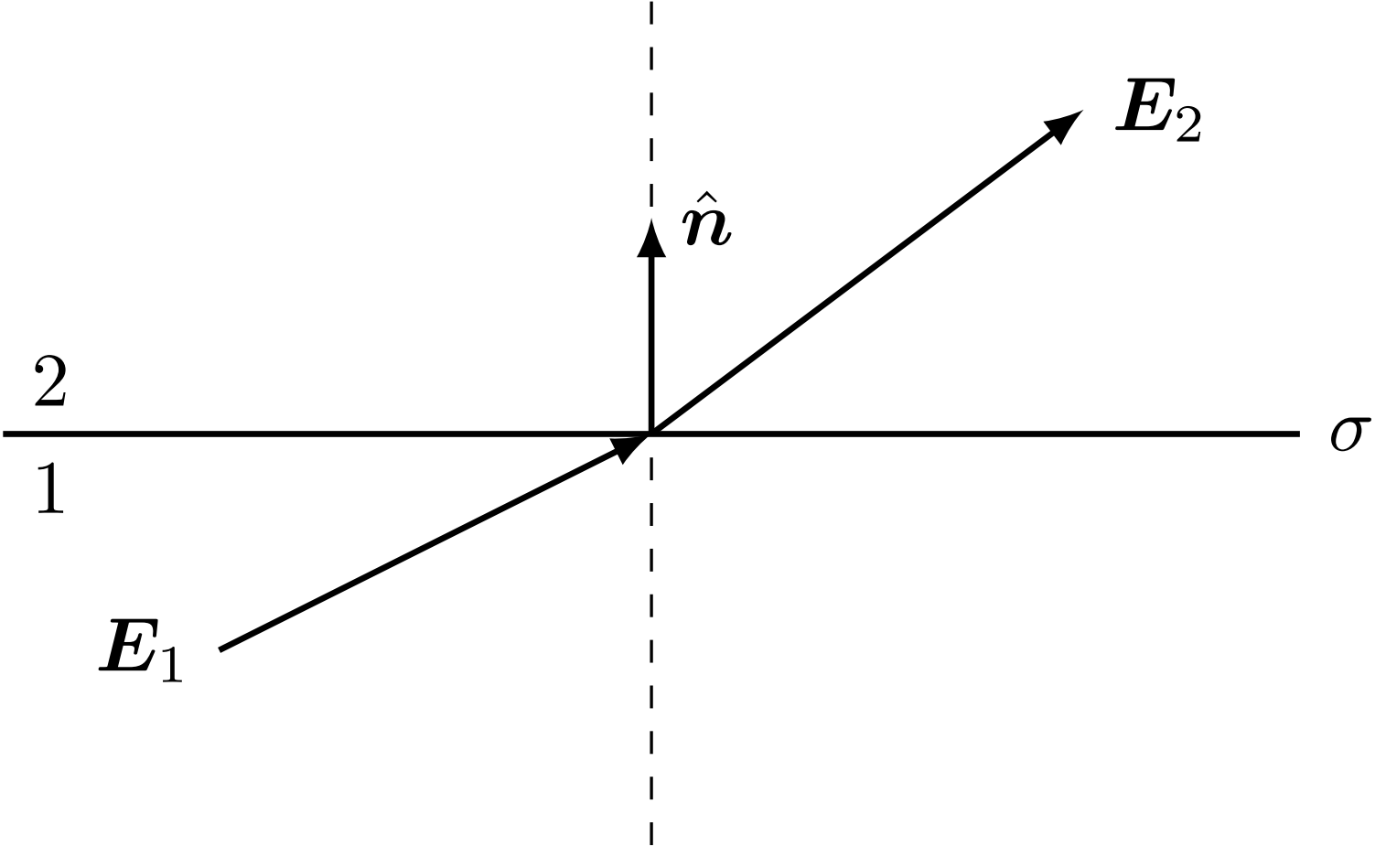
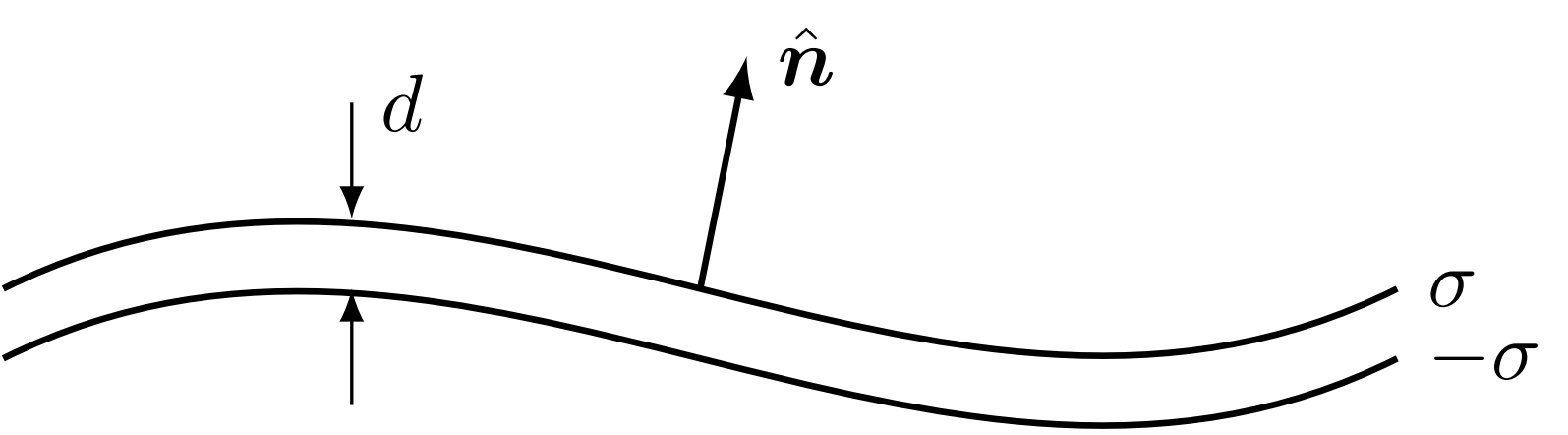

E
σ
A

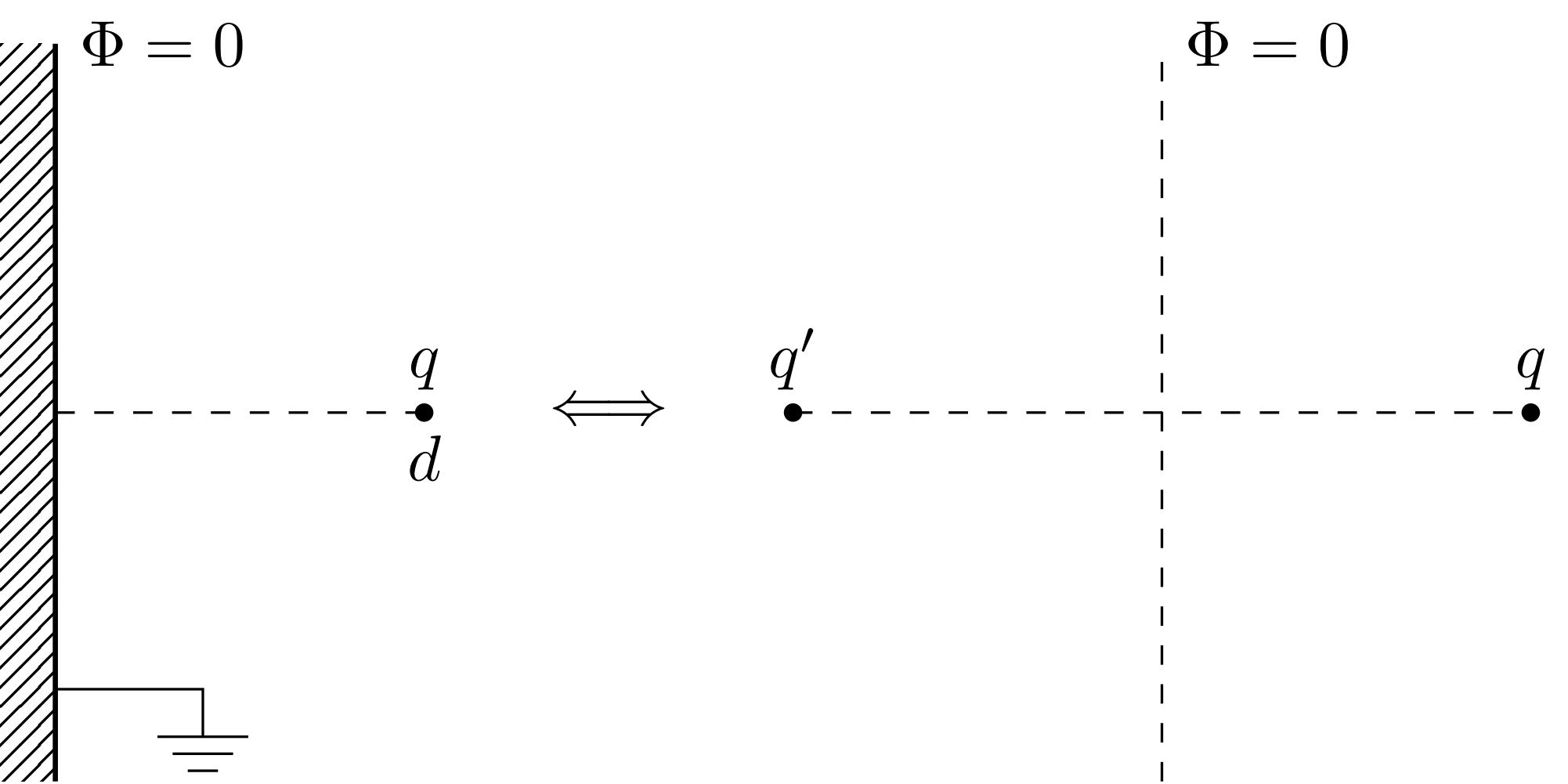

E
λ

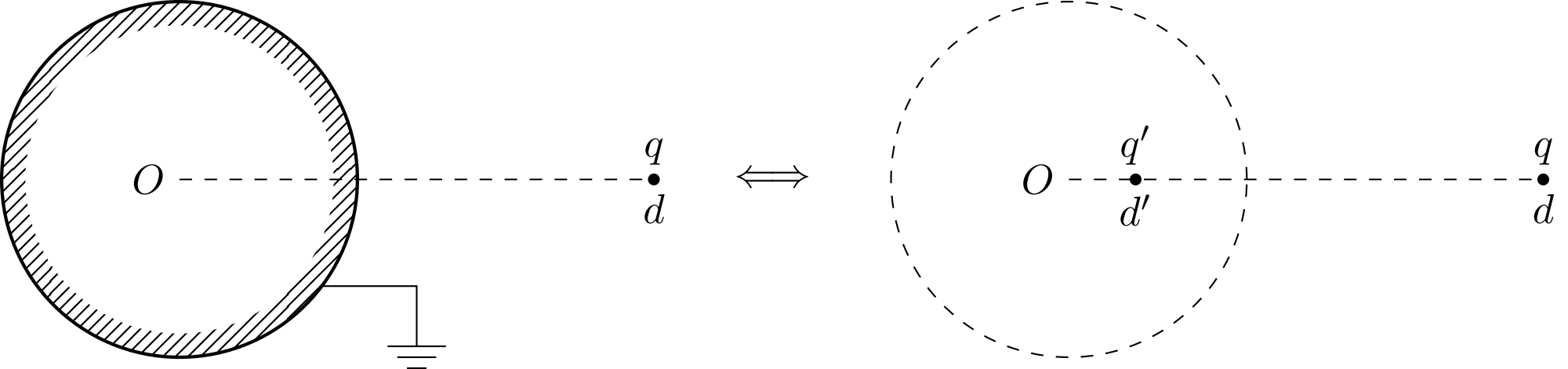

$\mathrm{d}\boldsymbol{E}$
$\mathrm{d}x$

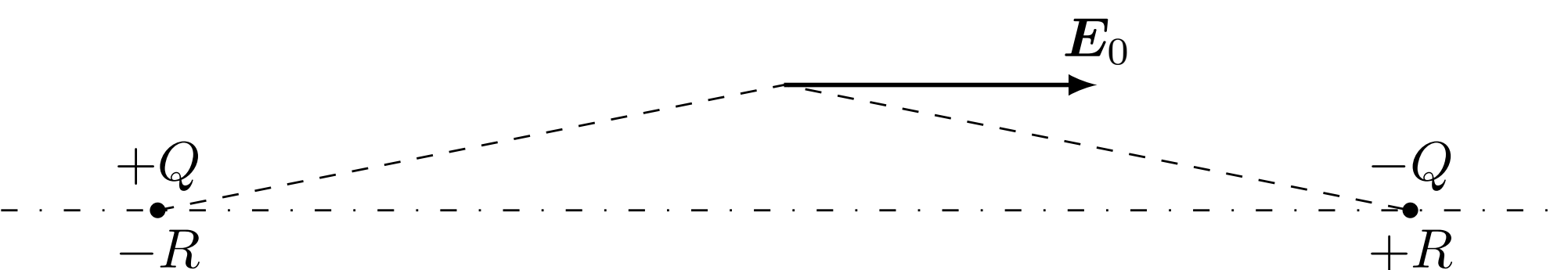

Φ
$\frac{1}{4\pi\varepsilon_0}\frac{q}{R}$
O
R
r

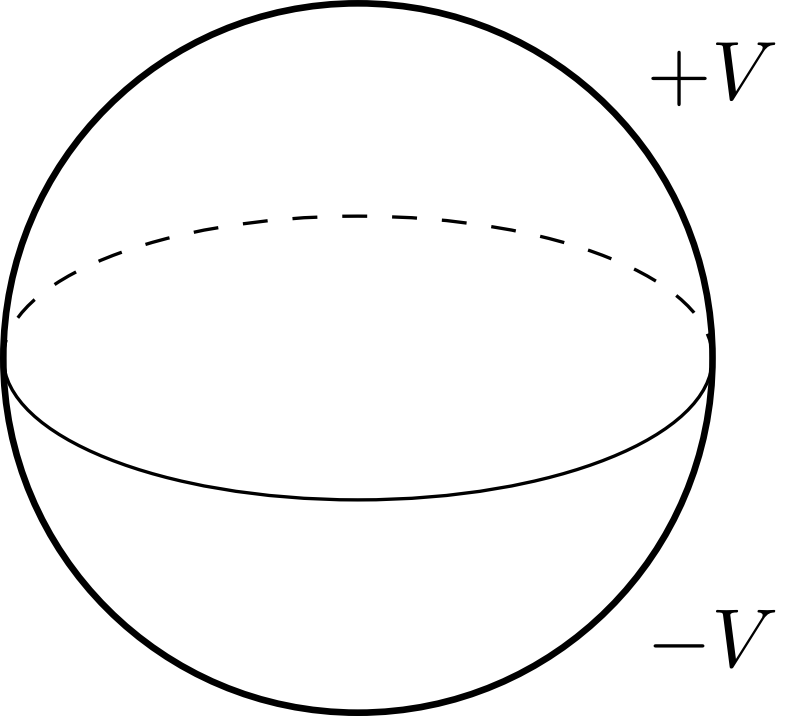

$\boldsymbol{E}_2$
$\hat{\boldsymbol{n}}$
2
1
σ
$\boldsymbol{E}_1$

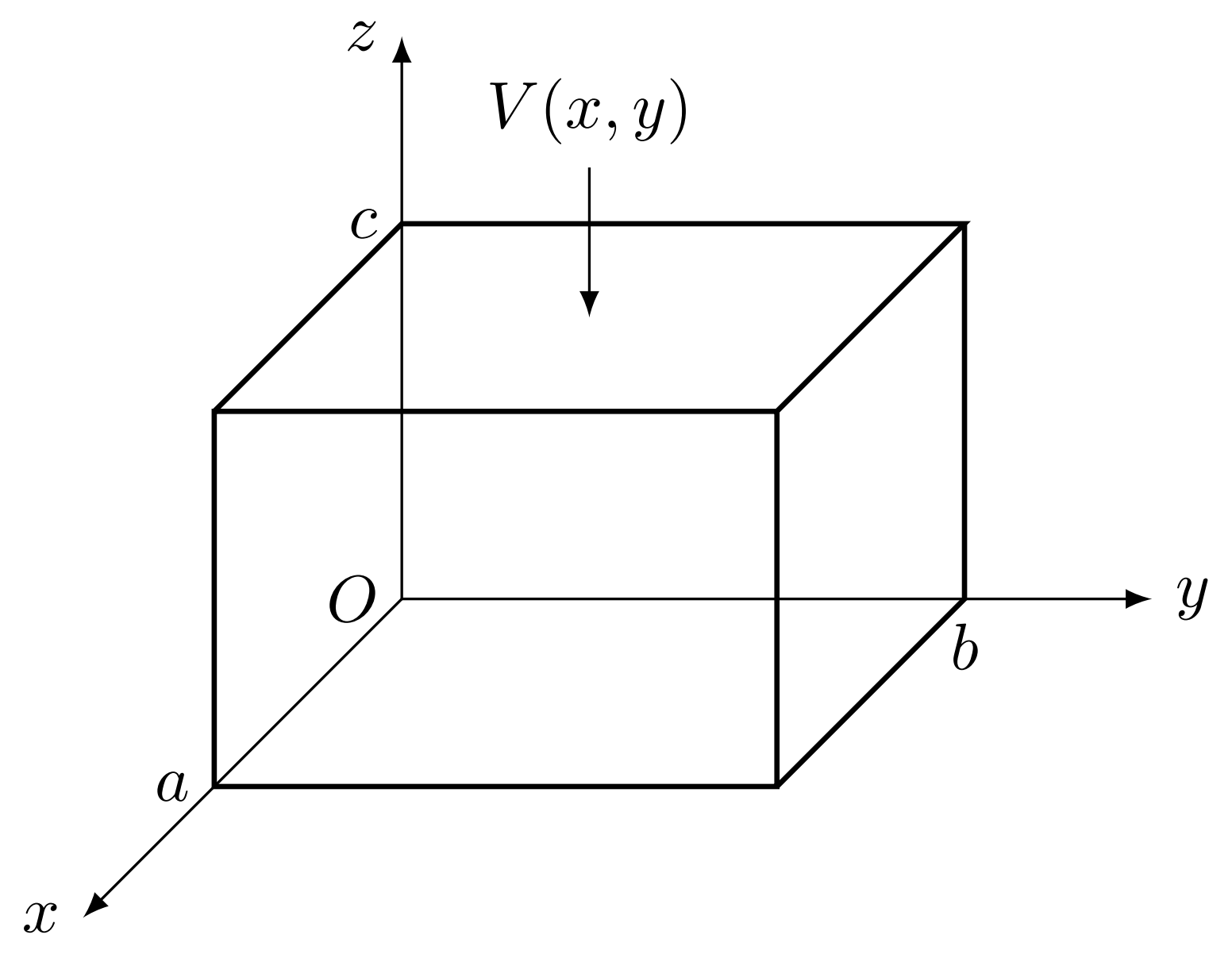

d
$\hat{\boldsymbol{n}}$
σ
$-\sigma$

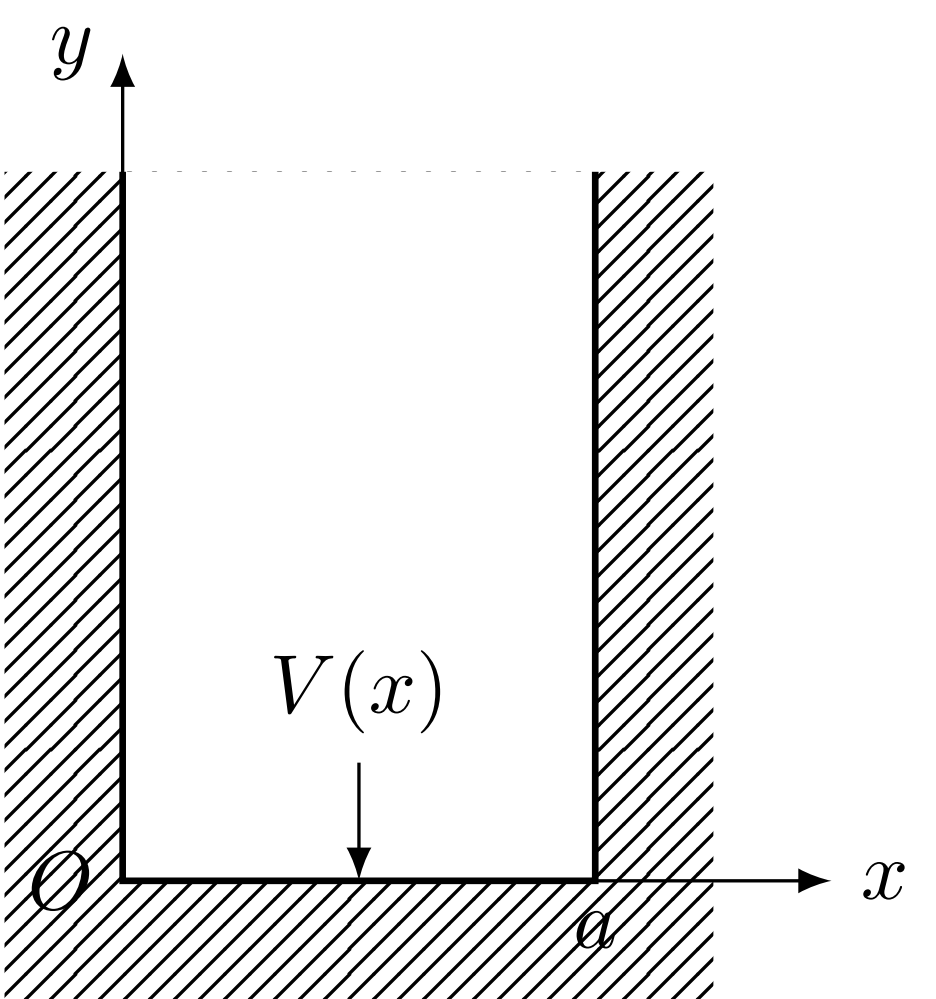

$\Phi = 0$
$\Phi = 0$
q
d
$\Longleftrightarrow$
q'
q

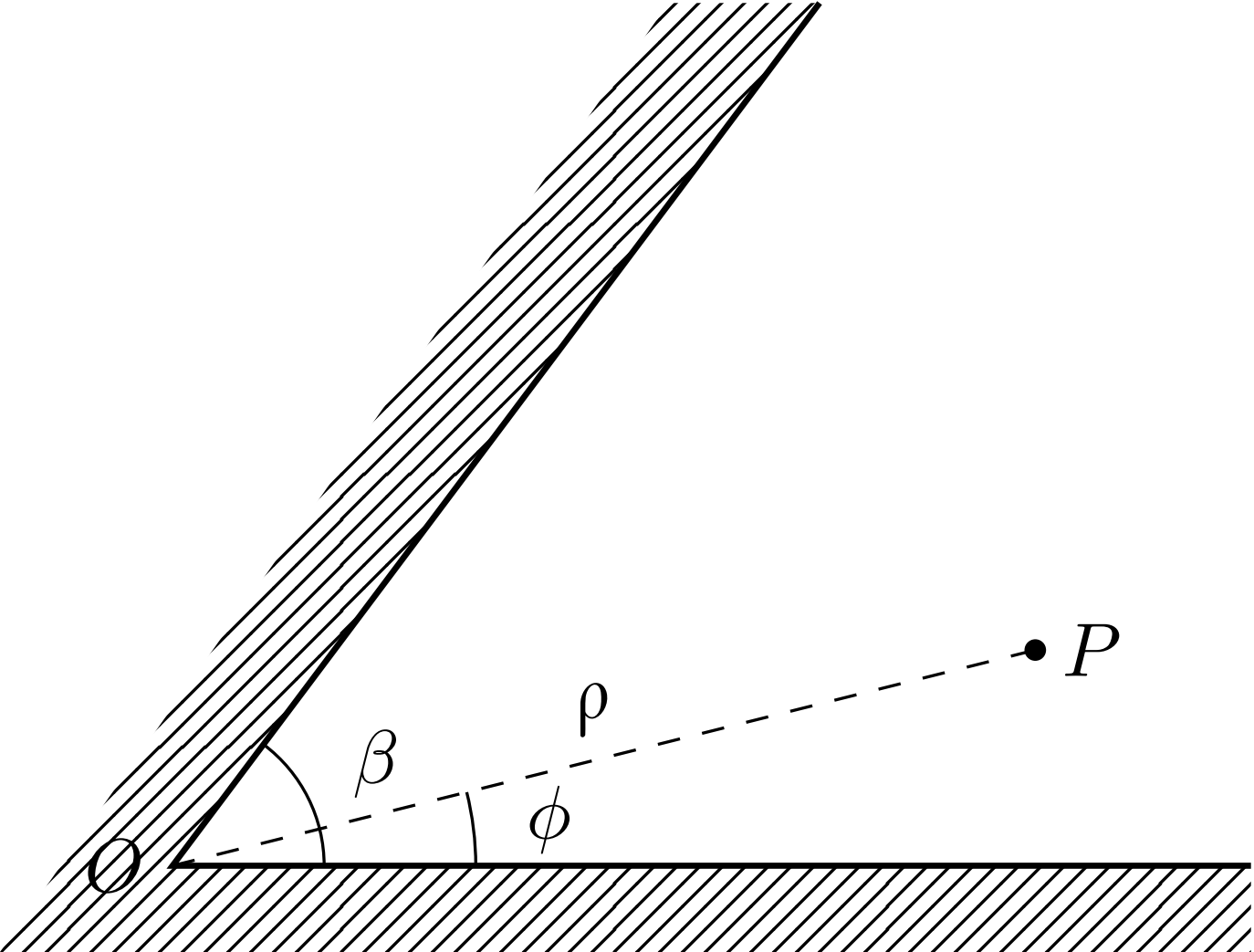

O
q
d
⟺
O
q′
d′
q
d

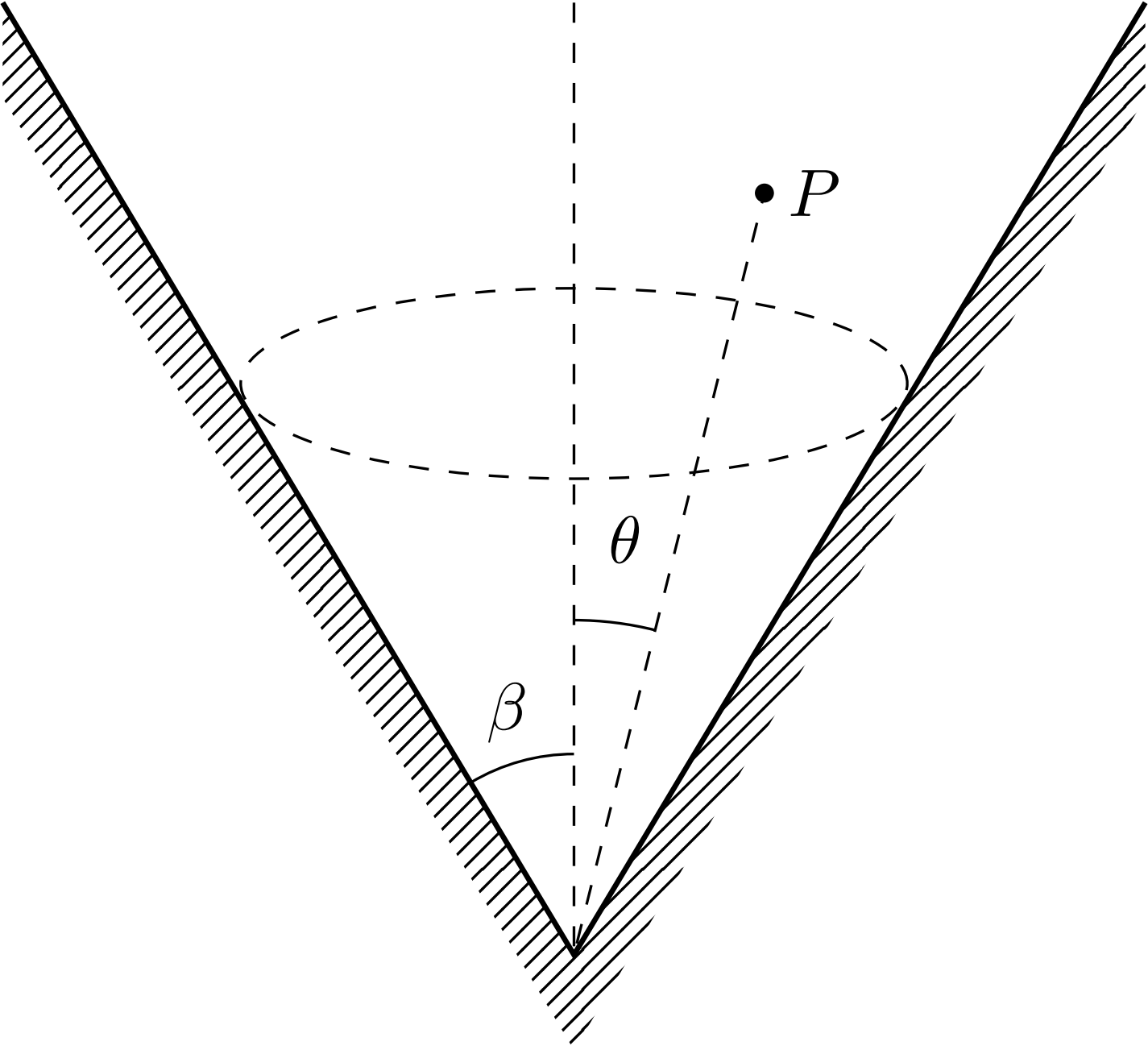

$\boldsymbol{E}_0$
$+Q$
$-R$
$-Q$
$+R$

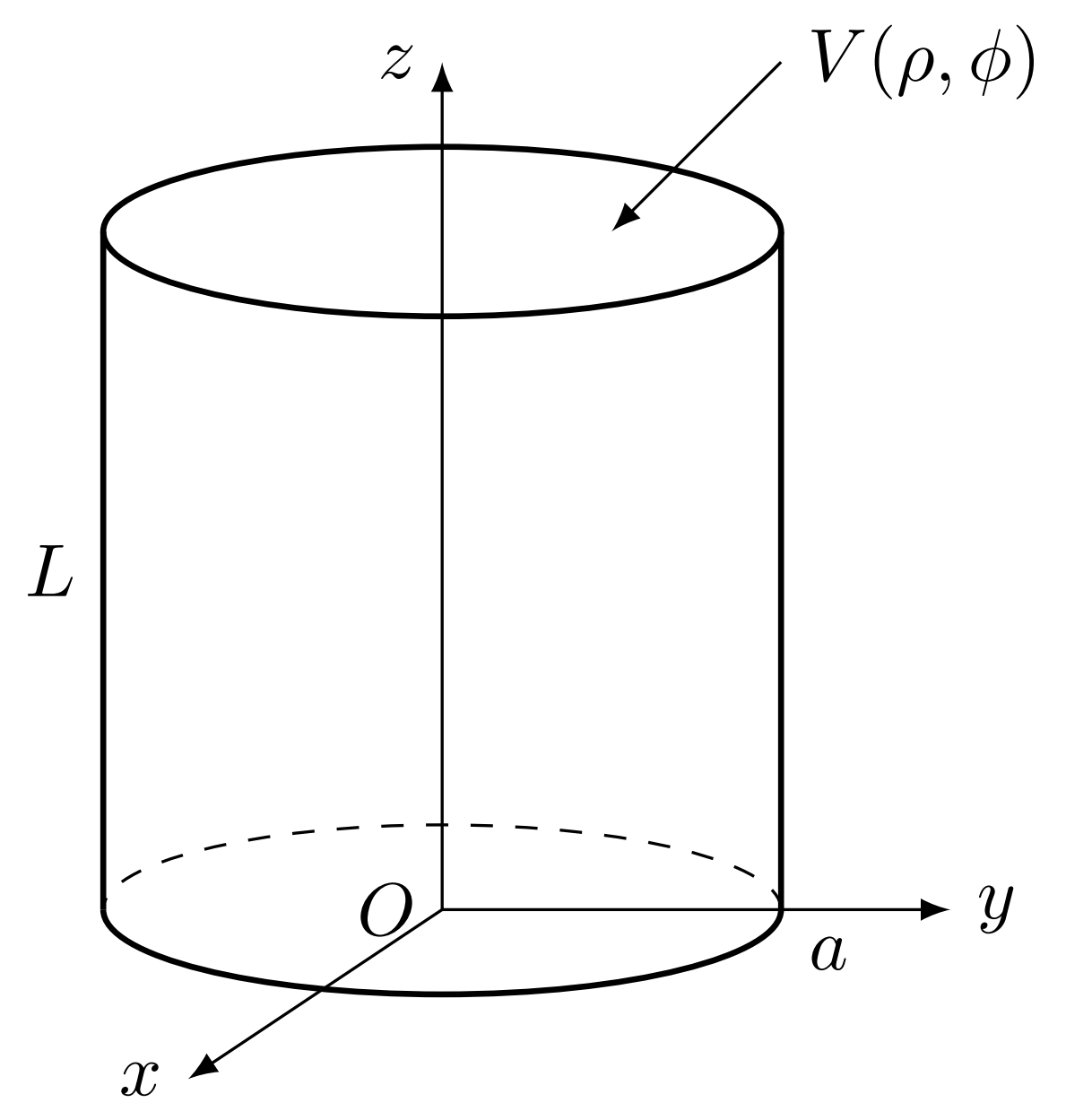

+V
−V

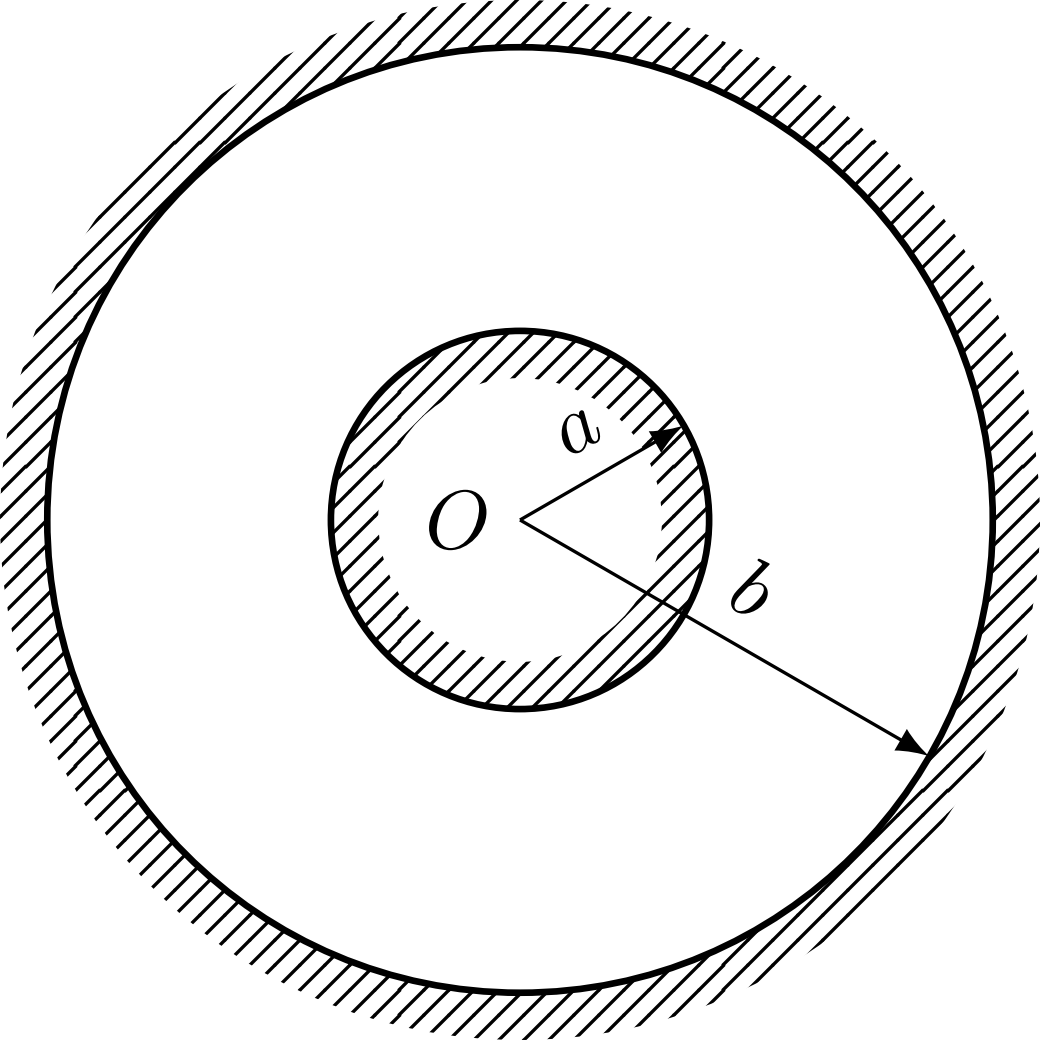

z
V(x, y)
c
O
y
b
a
x

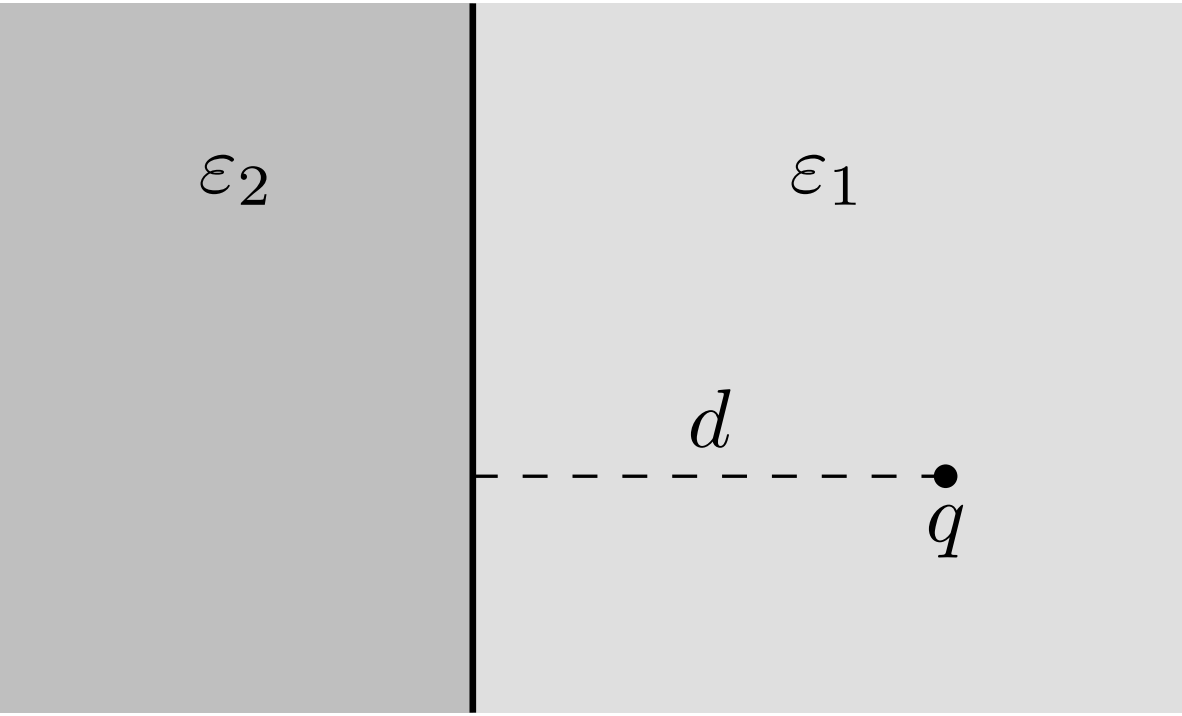

y
V(x)
O
a
x

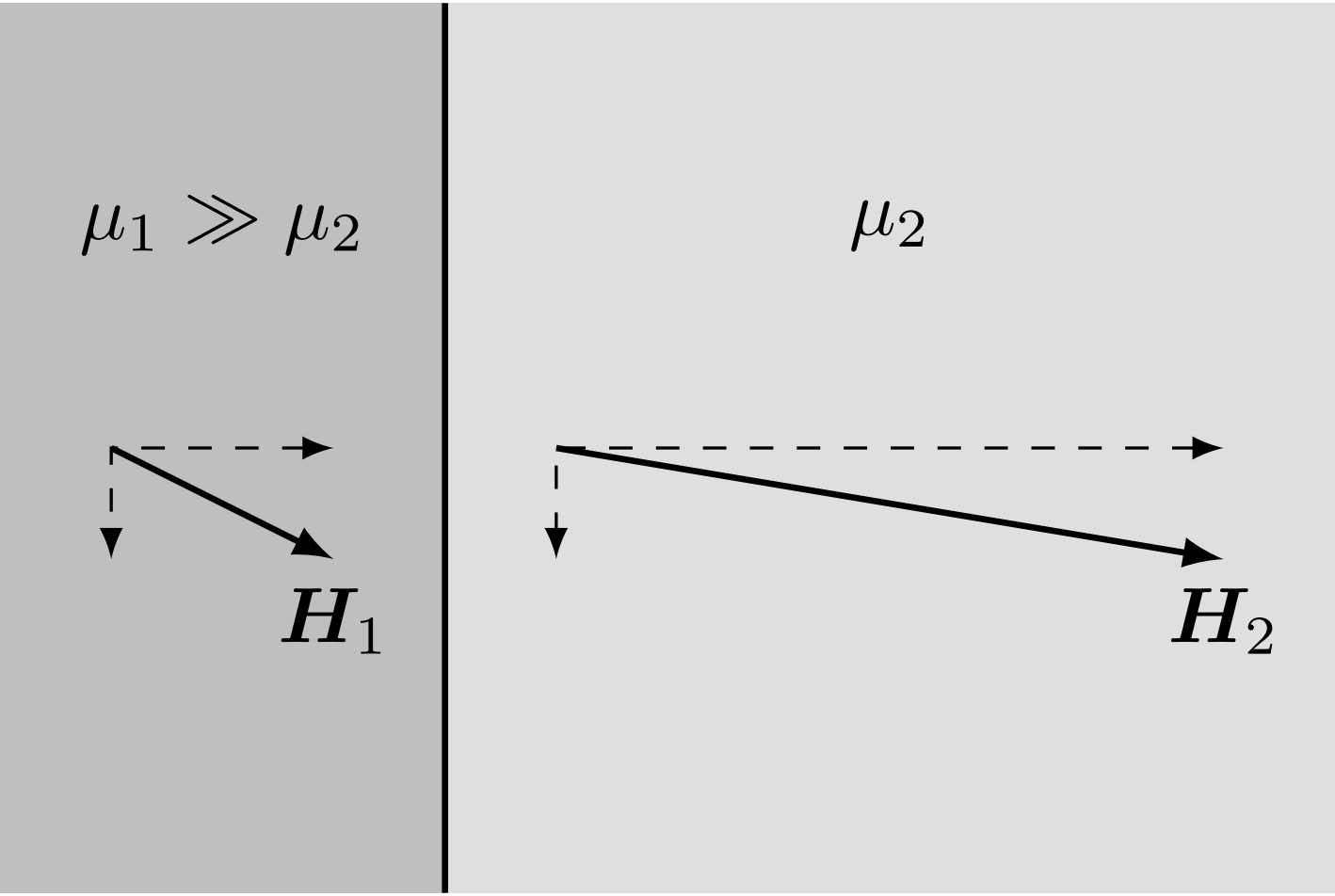

P
ρ
β
ϕ
O

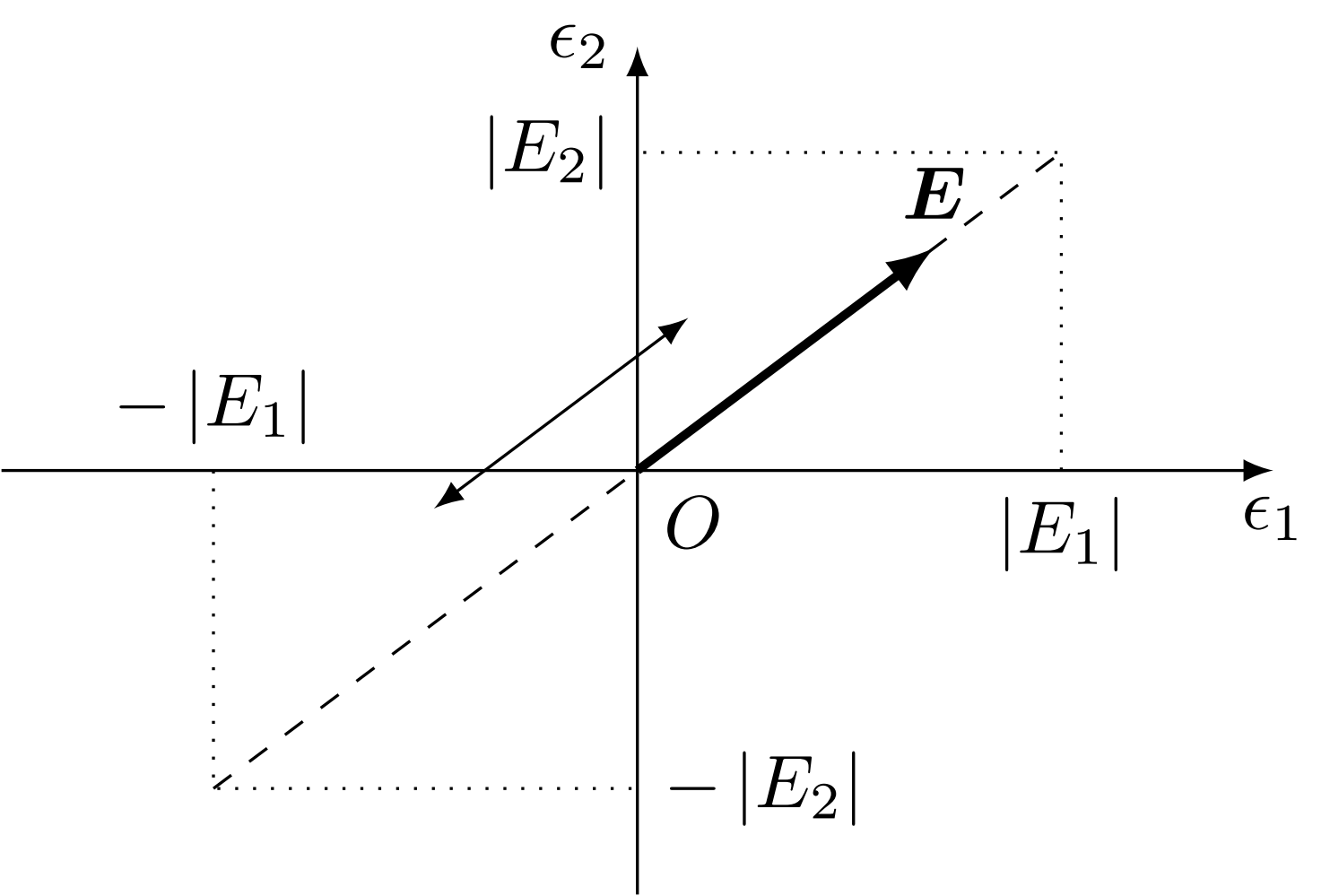

P
θ
β

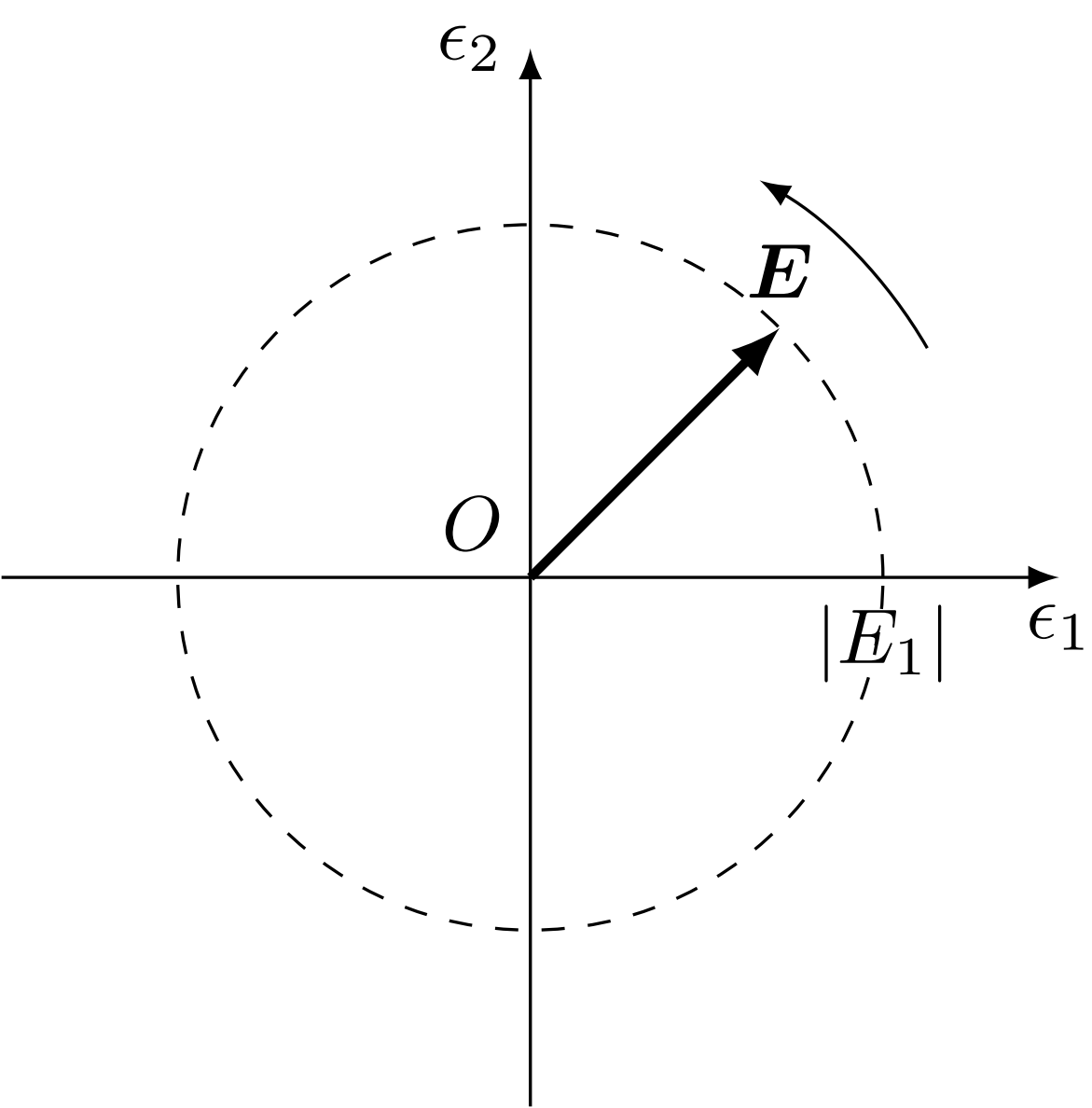

z
V(ρ, φ)
L
O
y
a
x

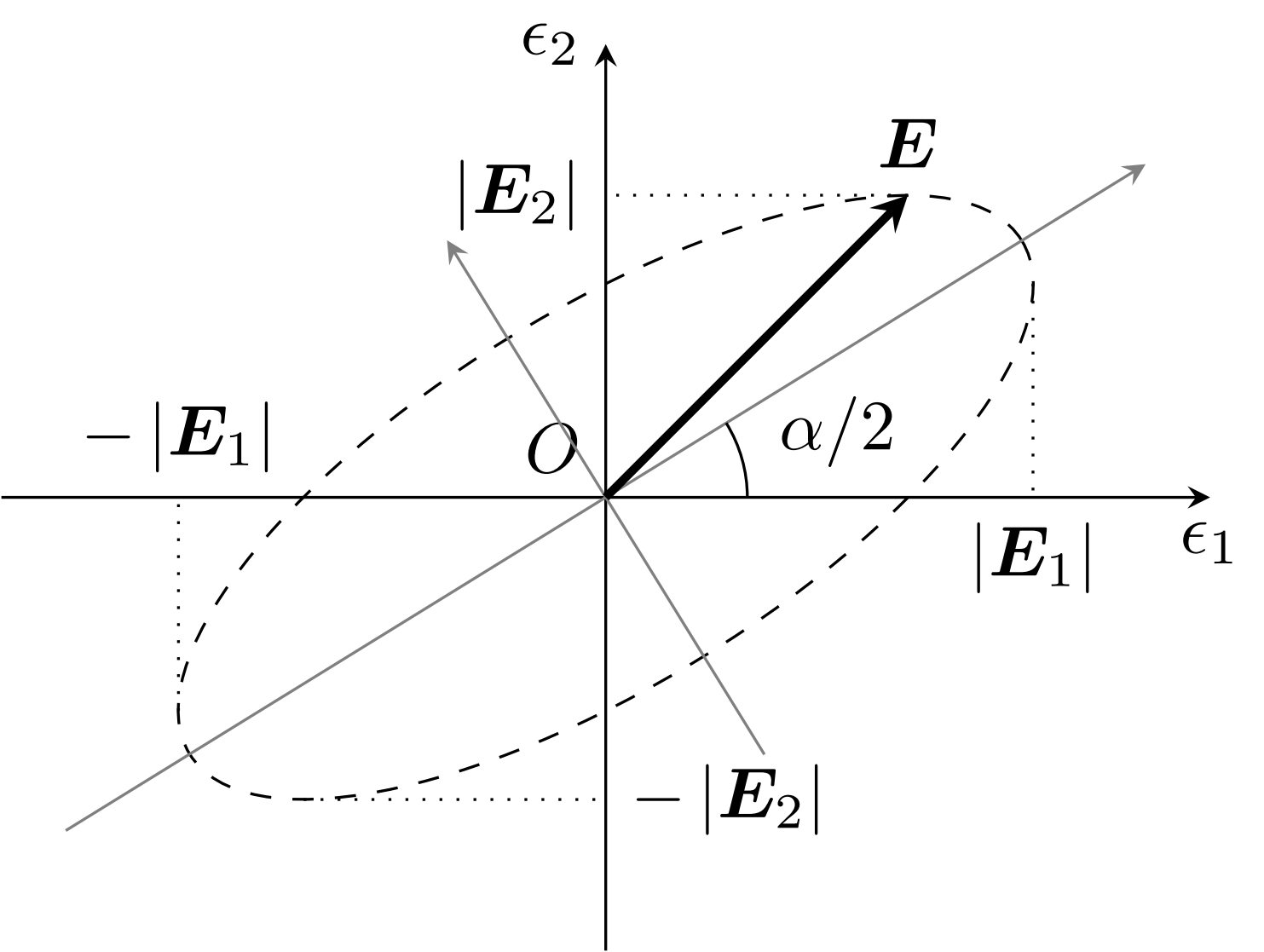

a
O
b

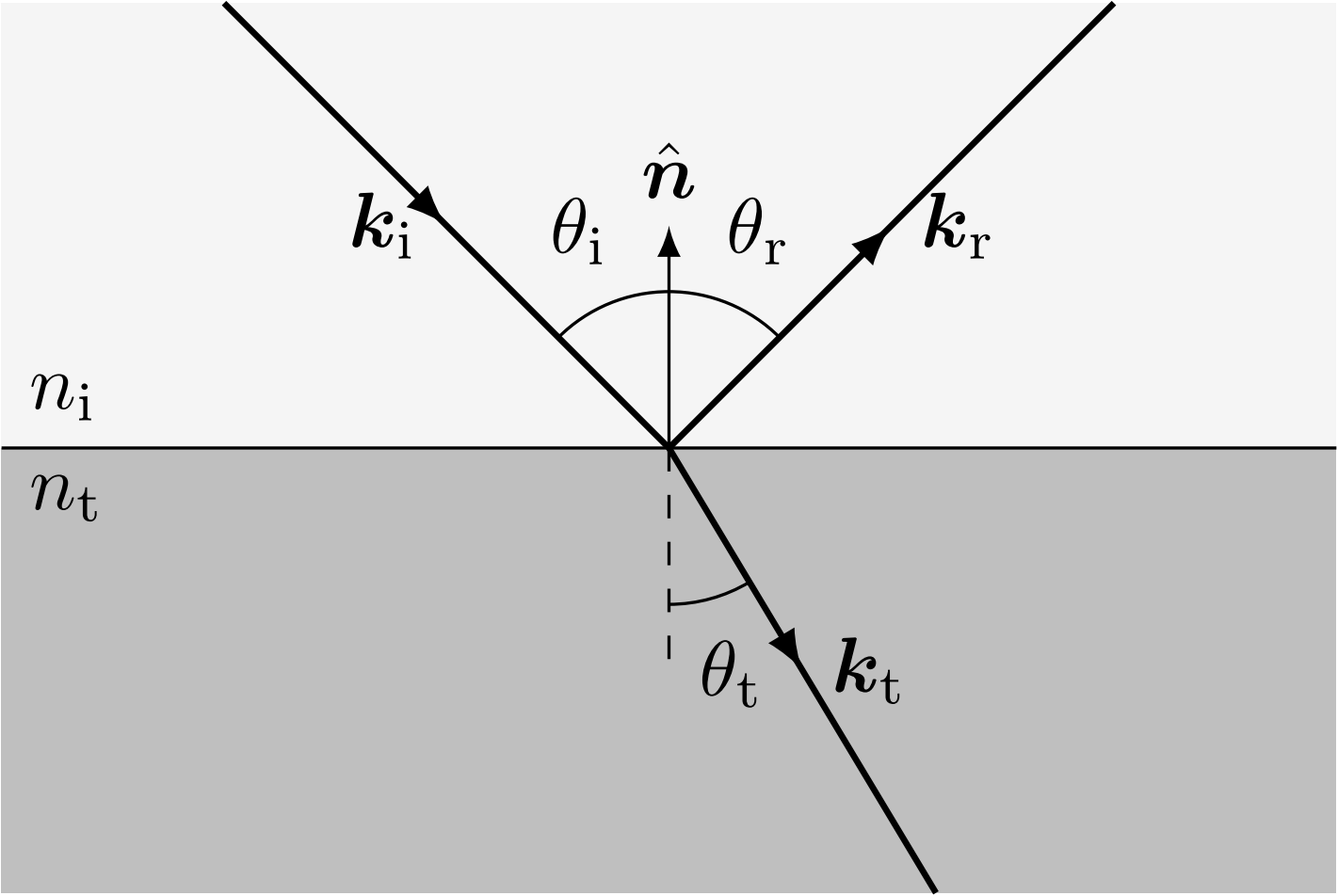

ε_2
ε_1
d
q

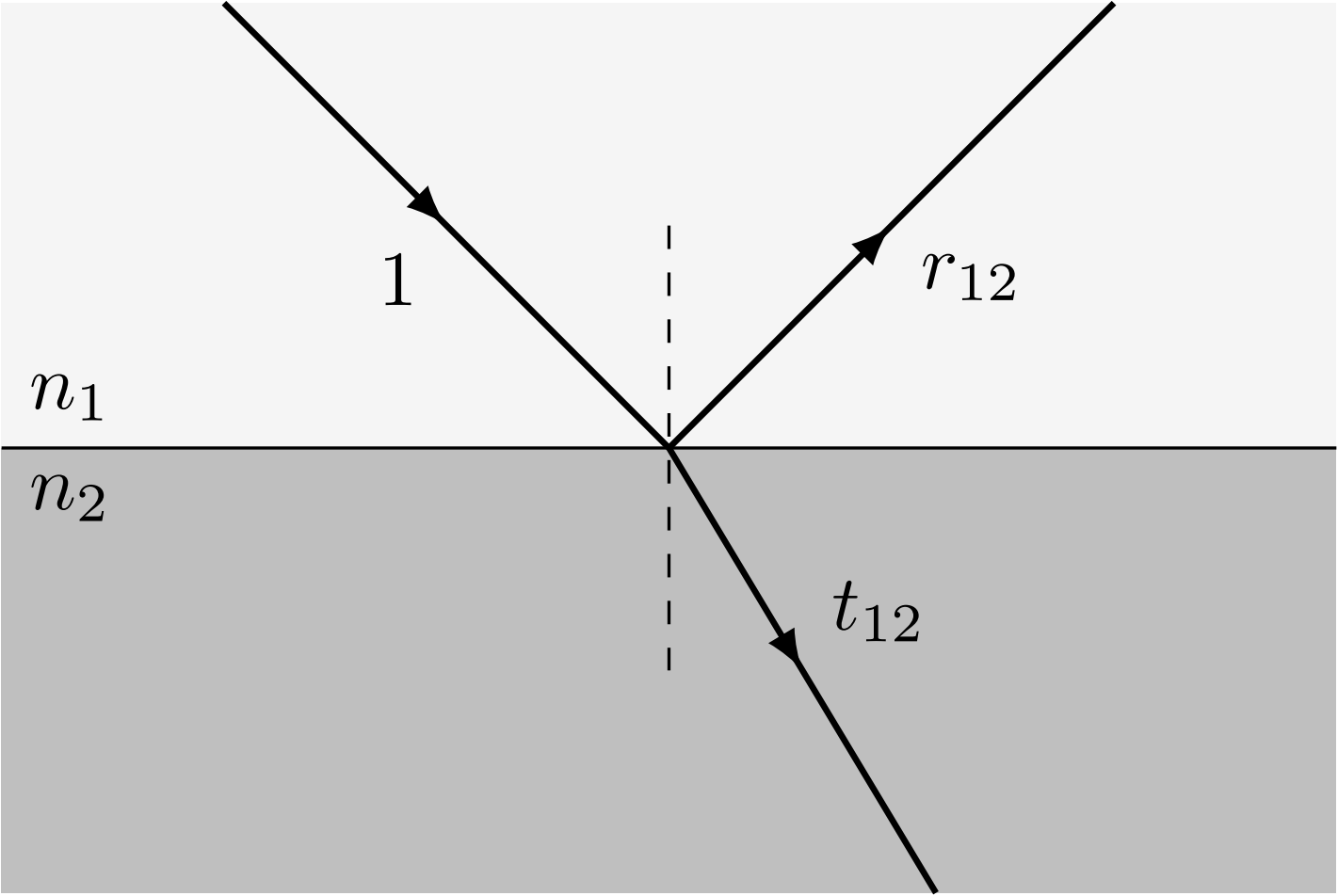

$\mu_1 \gg \mu_2$
μ_2
$\boldsymbol{H}_1$
$\boldsymbol{H}_2$

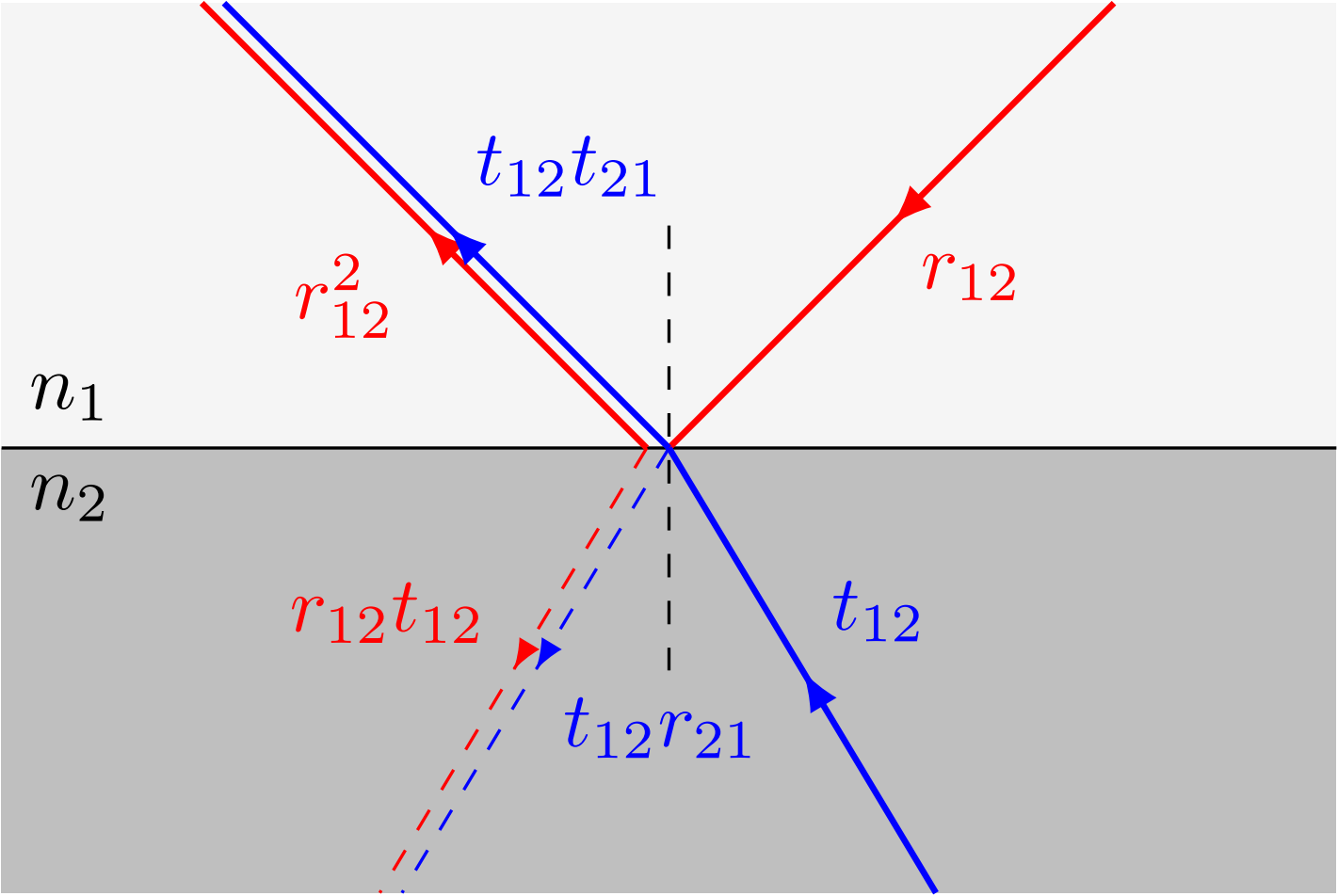

ϵ_2
$|E_2|$
$\boldsymbol{E}$
$-|E_1|$
O
$|E_1|$
ϵ_1
$-|E_2|$

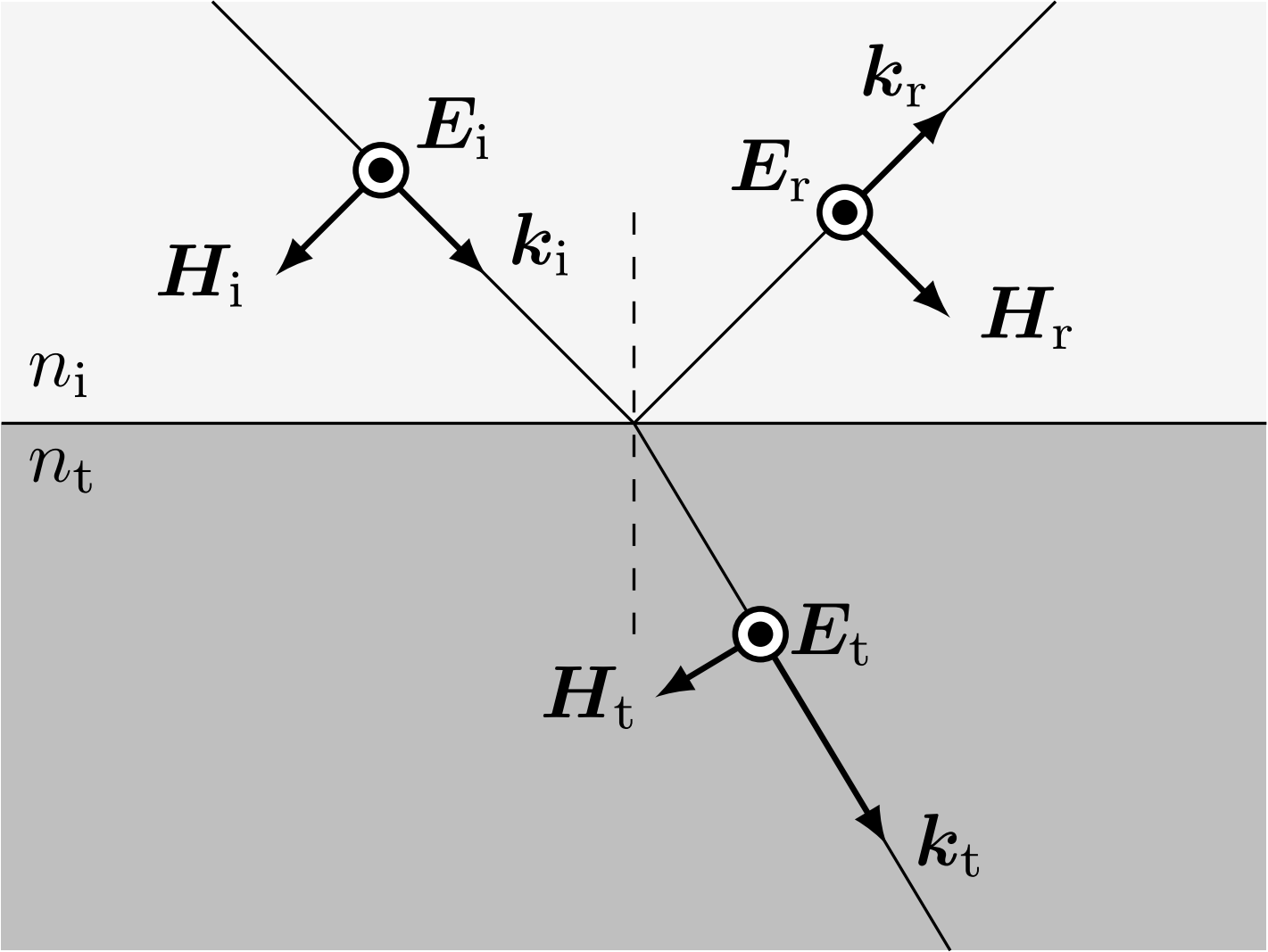

ϵ_2
$\boldsymbol{E}$
O
$|E_1|$
ϵ_1

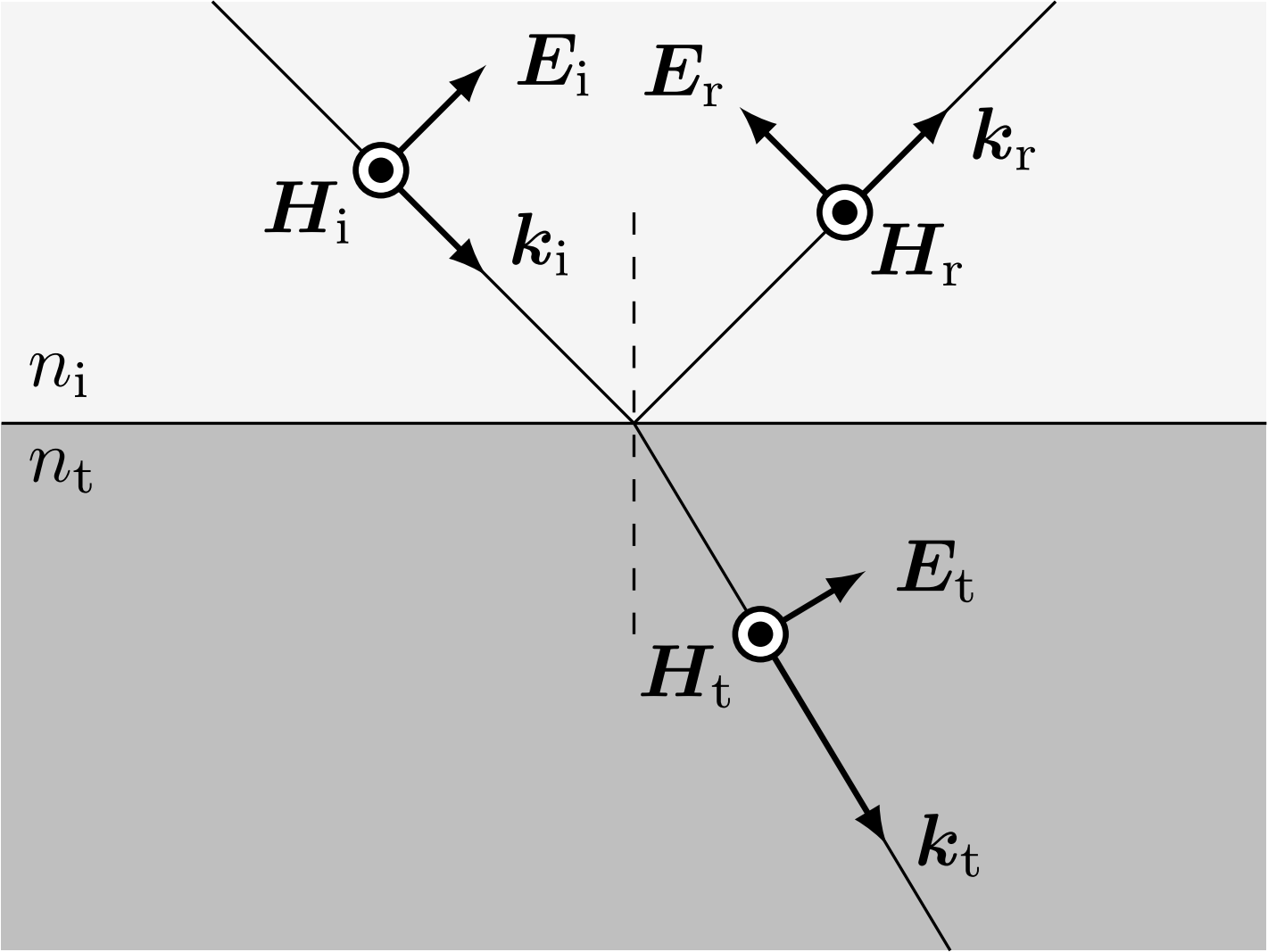

ϵ_2
$\boldsymbol{E}$
$|\boldsymbol{E}_2|$
$-|\boldsymbol{E}_1|$
O
$\alpha/2$
$|\boldsymbol{E}_1|$
ϵ_1
$-|\boldsymbol{E}_2|$

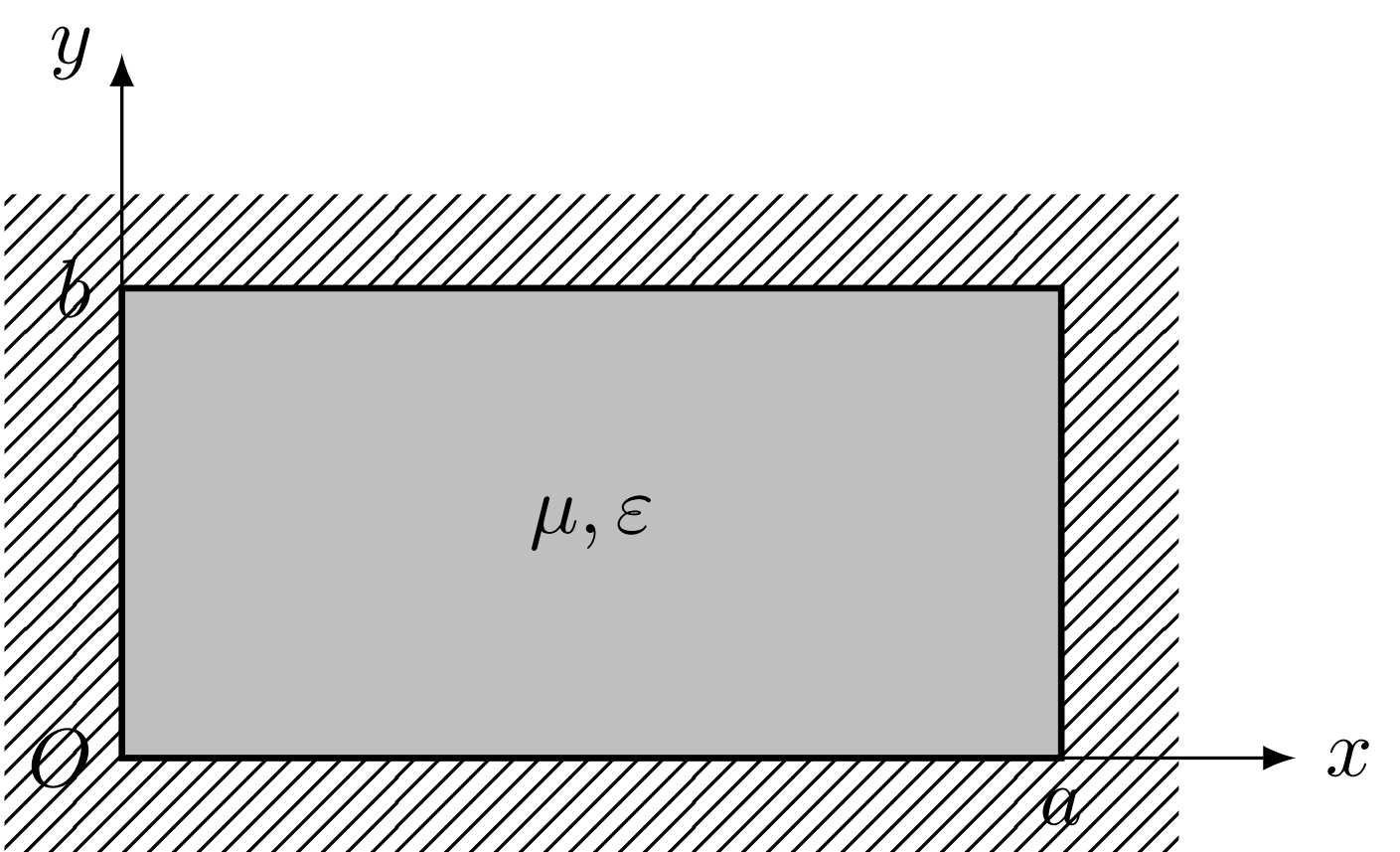

$\hat{\boldsymbol{n}}$
$\boldsymbol{k}_\mathrm{i}$
θ_i
θ_r
$\boldsymbol{k}_\mathrm{r}$
n_i
n_t
θ_t
$\boldsymbol{k}_\mathrm{t}$

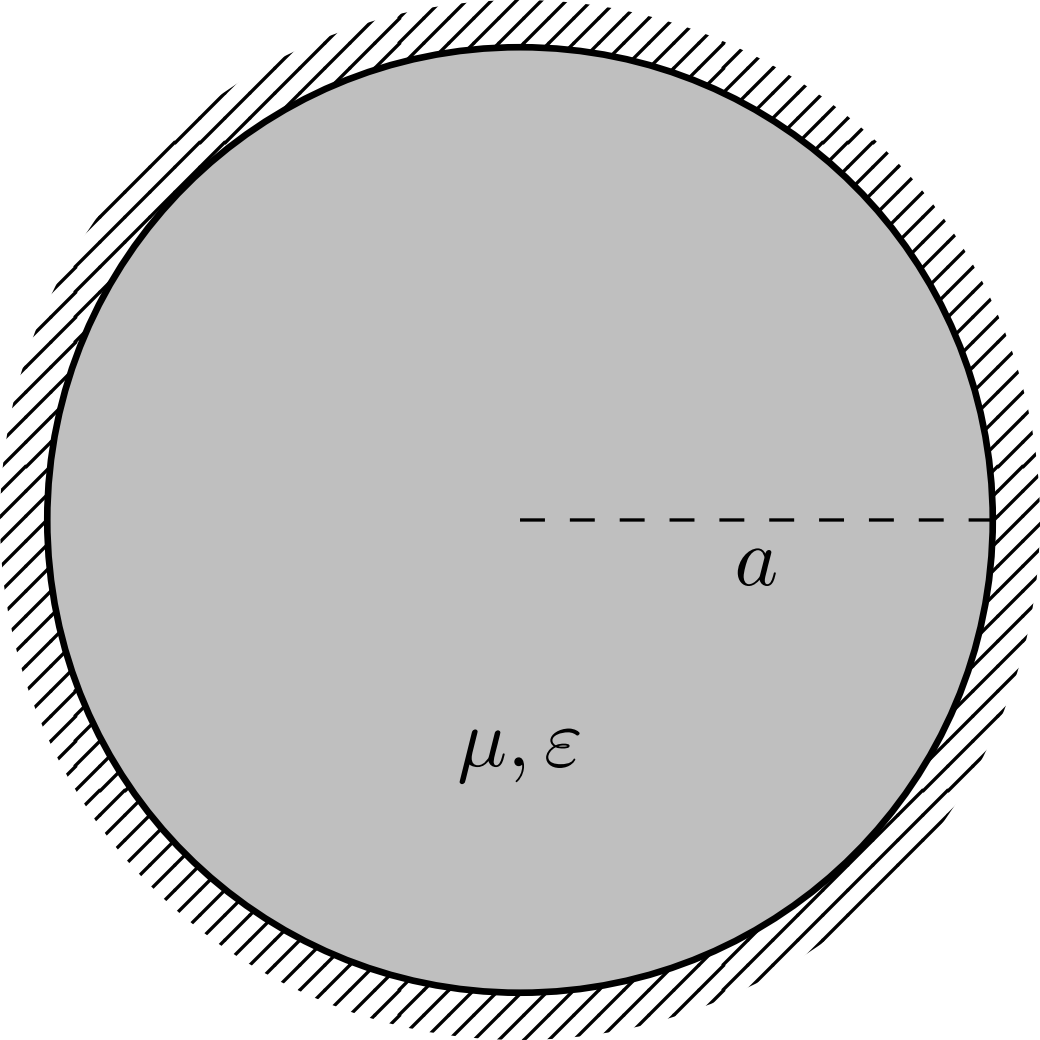

1
r_{12}
n_1
n_2
t_{12}

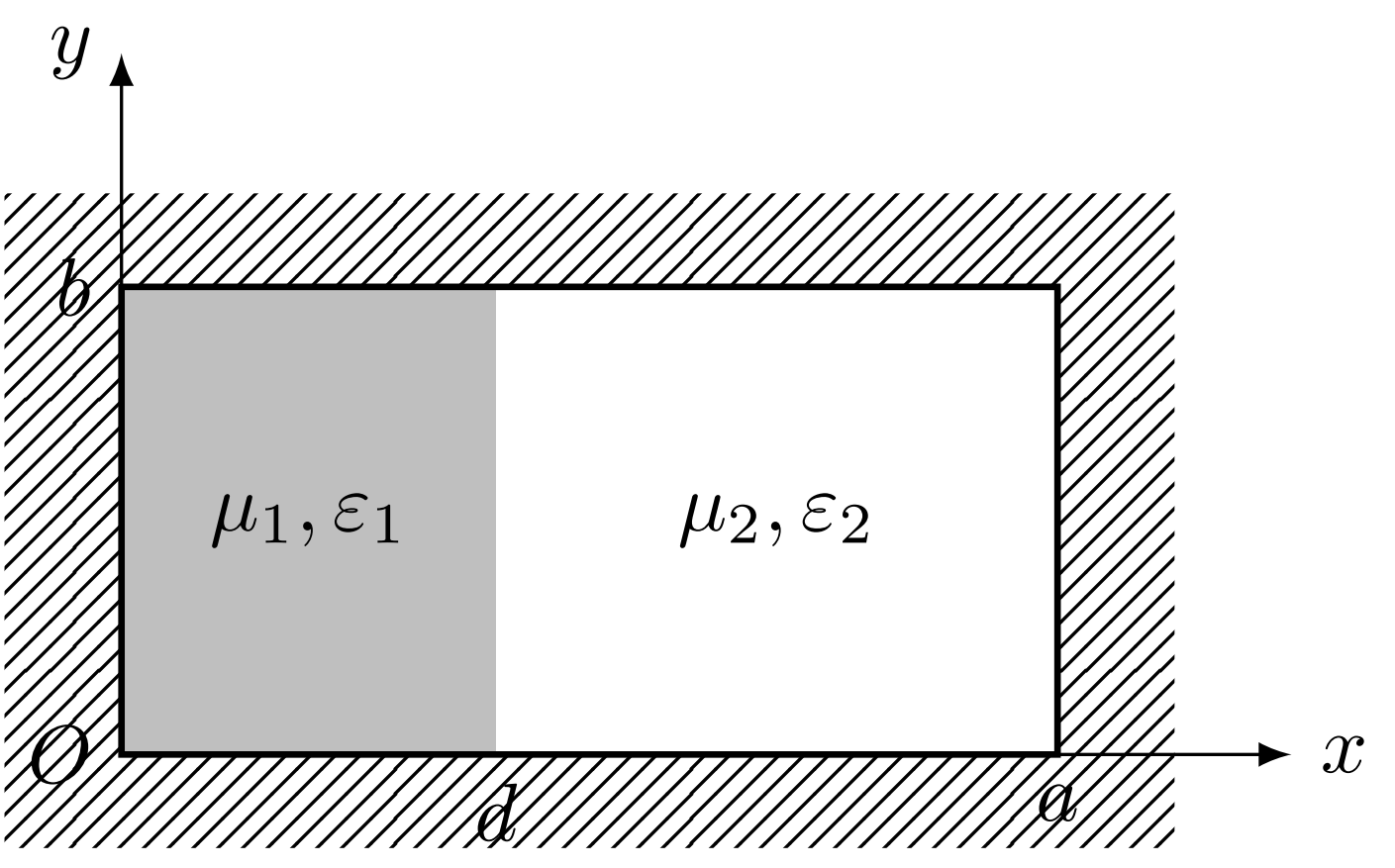

$t_{12}t_{21}$
r_{12}^2
r_{12}
n_1
n_2
$r_{12}t_{12}$
t_{12}
$t_{12}r_{21}$

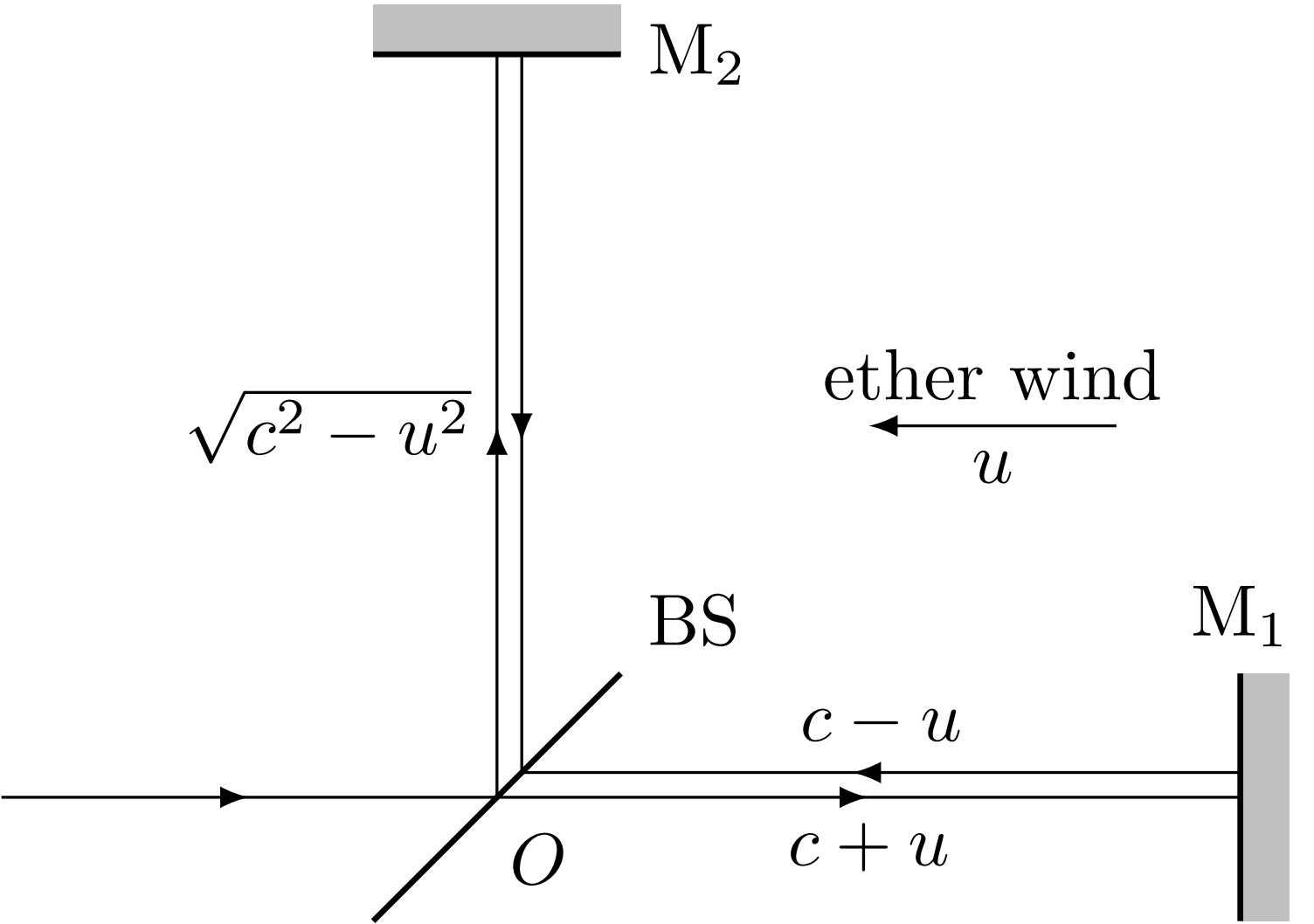

E_{i}
H_{i}
k_{i}
k_{r}
E_{r}
H_{r}
n_{i}
n_{t}
E_{t}
H_{t}
k_{t}

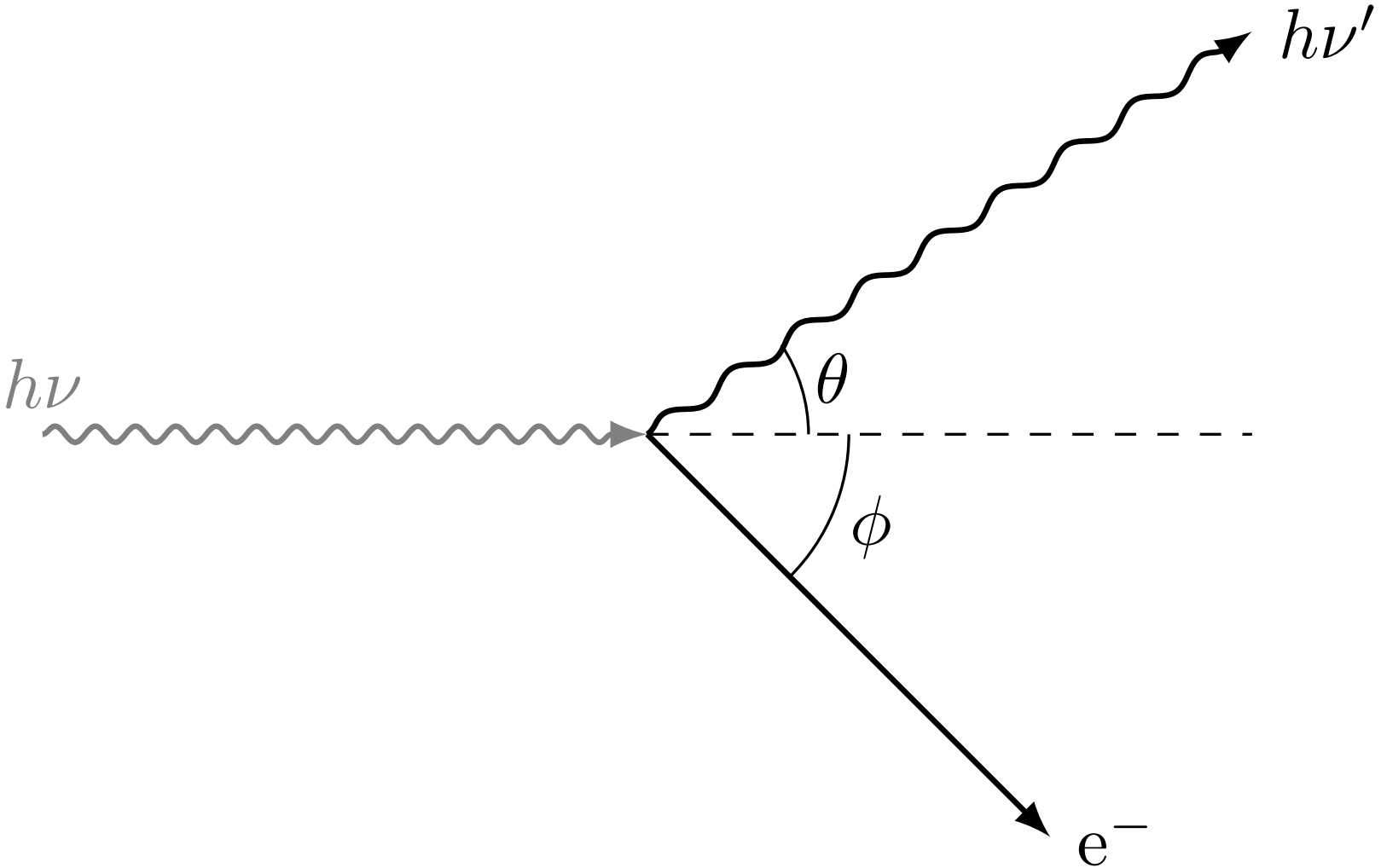

$\boldsymbol{E}_\mathrm{i}$
$\boldsymbol{E}_\mathrm{r}$
$\boldsymbol{k}_\mathrm{r}$
$\boldsymbol{H}_\mathrm{i}$
$\boldsymbol{k}_\mathrm{i}$
$\boldsymbol{H}_\mathrm{r}$
n_i
n_t
$\boldsymbol{E}_\mathrm{t}$
$\boldsymbol{H}_\mathrm{t}$
$\boldsymbol{k}_\mathrm{t}$

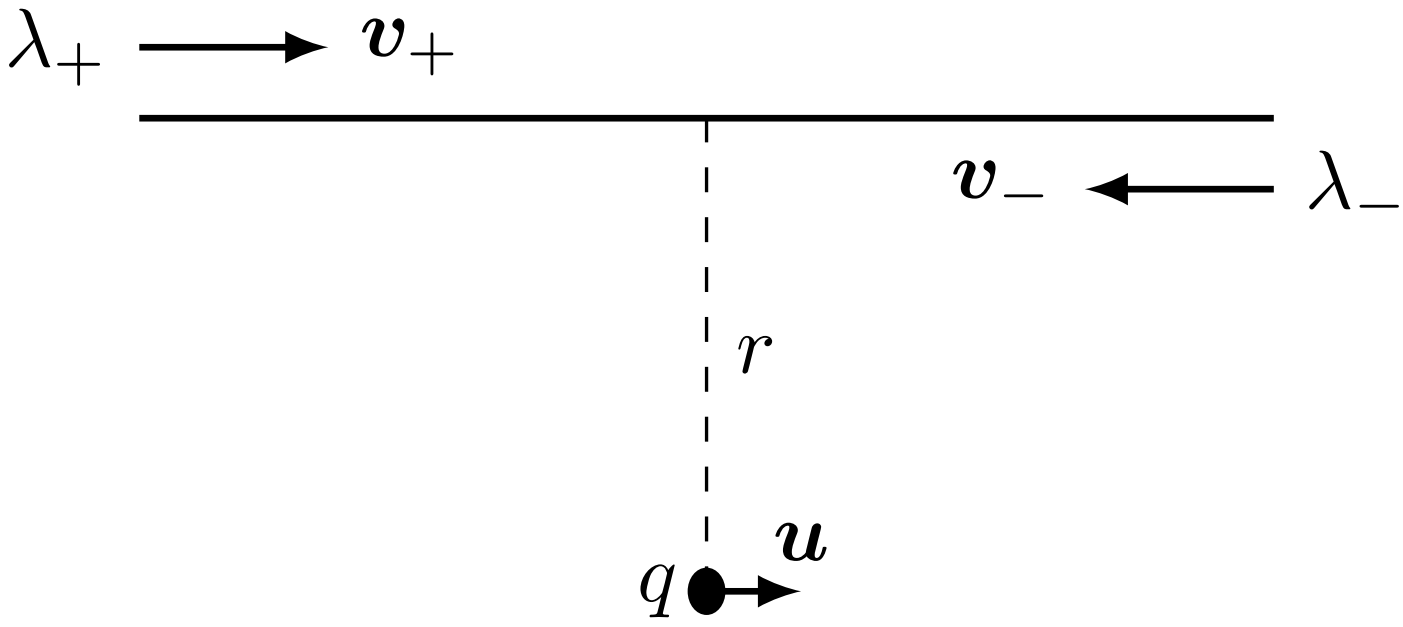

y
b
μ, ε
O
x
a

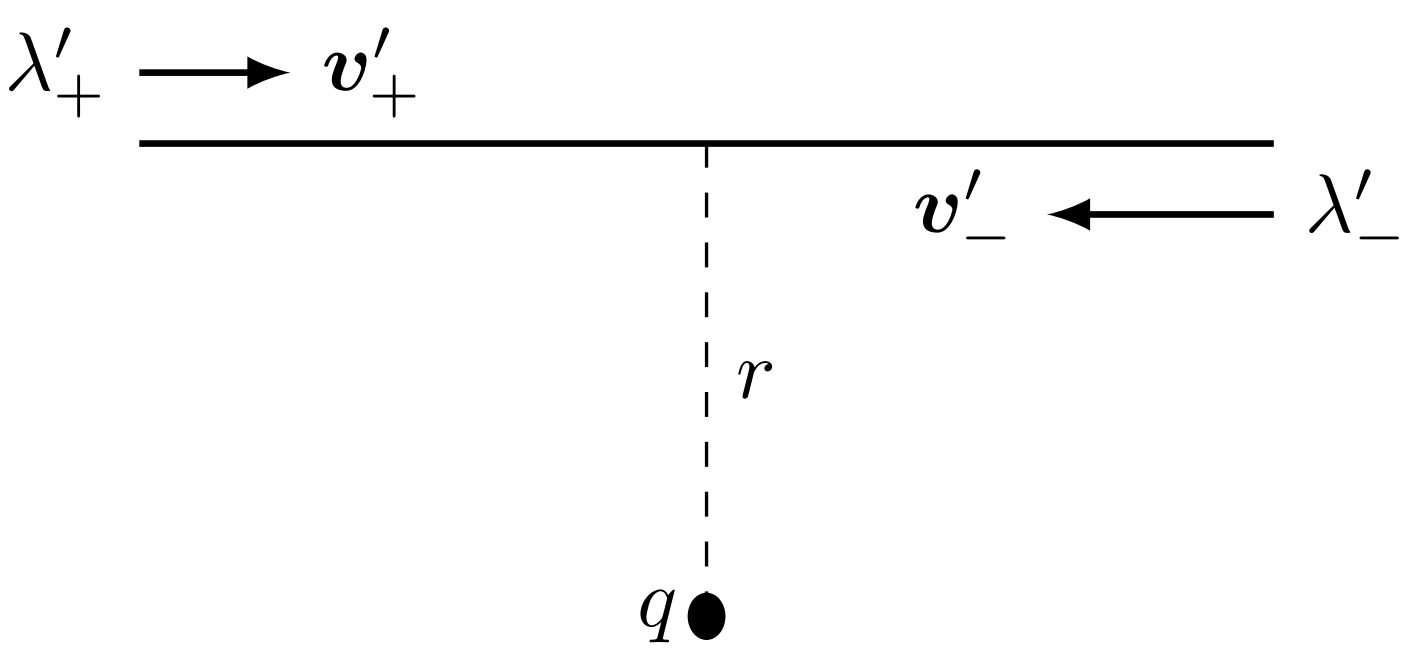

a
μ, ε


y
b
μ_1, ε_1
μ_2, ε_2
O
d
a
x


M2
ether wind
u
√(c² − u²)
BS
M1
c − u
O
c + u


$h\nu'$
$h\nu$
θ
ϕ
e^-


λ_+
$\boldsymbol{v}_+$
$\boldsymbol{v}_-$
λ_-
r
q
$\boldsymbol{u}$


λ'_+
$\boldsymbol{v}'_+$
$\boldsymbol{v}'_-$
λ'_-
r
q