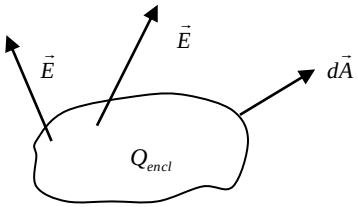
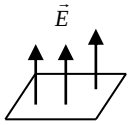
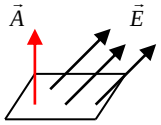
Kap 22 Gauss lov





$\Phi_E = E \cdot A$

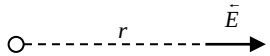


$\Phi_E = \vec{E} \cdot \vec{A}$

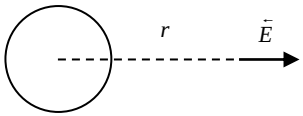
Elektrisk fluks $\Phi_E = \int \vec{E} \cdot d\vec{A}$

Gauss' lov $\Phi_E = \oint \vec{E} \cdot d\vec{A} = \frac{Q_{encl}}{\varepsilon_0}$

Feltet utenfor en punktladni ng $E = \frac{1}{4\pi\varepsilon_0}\frac{Q}{r^2}$

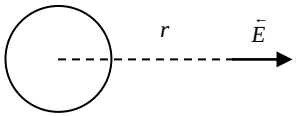


Feltet utenfor en ladet, ledende kule $E = \frac{1}{4\pi\varepsilon_0}\frac{Q}{r^2}$

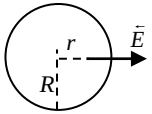


Feltet innenfor en ladet, ledende kule $E = 0$

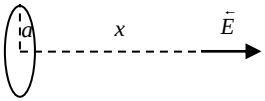
Feltet utenfor en uniformt ladet, ikke - ledende kule $E = \frac{1}{4\pi\varepsilon_0}\frac{Q}{r^2}$



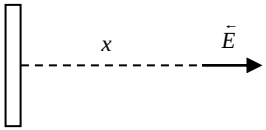
Feltet innenfor en uniformt ladet, ikke - ledende kule $E = \frac{1}{4\pi\varepsilon_0}\frac{Qr}{R^3}$



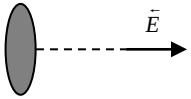
Feltet fra en ringladnin g $E = \frac{Qx}{4\pi\varepsilon_0(x^2 + a^2)^{\frac{3}{2}}}$



Feltet fra en uendelig lang stav $E = \frac{\lambda}{2\pi\varepsilon_0 x}$



Feltet fra en stor uniformt ladet skive $E = \frac{\sigma}{2\varepsilon_0}$



Feltet mellom to kondensato r - plater $E = \frac{\sigma}{\varepsilon_0}$