# Maxwells ligninger på generell form

| Integralform | Differensiell form | Navn |
|---|---|---|
| $\oint_S \vec{E} \cdot d\vec{A} = \frac{q}{e_0}$ | $\nabla \cdot \vec{E} = \frac{r}{e_0}$ | Gauss' lov for E |
| $\oint_S \vec{B} \cdot d\vec{A} = 0$ | $\nabla \cdot \vec{B} = 0$ | Gauss' lov for B |
| $\oint_C \vec{E} \cdot d\vec{s} = -\frac{d}{dt}\int_S \vec{B} \cdot d\vec{A}$ | $\nabla \times \vec{E} = -\frac{\partial \vec{B}}{\partial t}$ | Faraday-Henrys lov |
| $\oint_C \vec{B} \cdot d\vec{s} = m_0 I + m_0 e_0 \frac{d}{dt}\int_S \vec{E} \cdot d\vec{A}$ | $\nabla \times \vec{B} = m_0 \vec{j} + m_0 e_0 \frac{\partial \vec{E}}{\partial t}$ | Ampère-Maxwells lov |

Lorentzkraften: $\vec{F} = q\left(\vec{E} + \vec{v} \times \vec{B}\right)$

Dette danner grunnlaget for videre studier i elektromagnetisme.