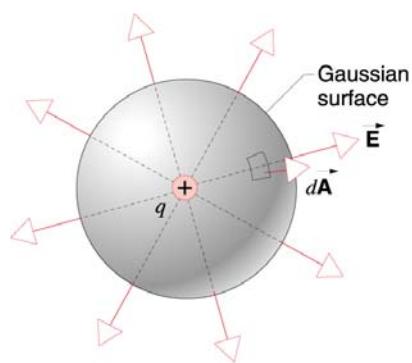


Gauss' law

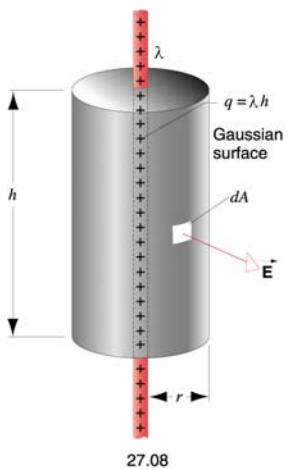
$$\Phi_E = \oint \vec{E} \bullet d\vec{A} = \frac{q}{\epsilon_0}$$

Gauss' law and Coulomb's law



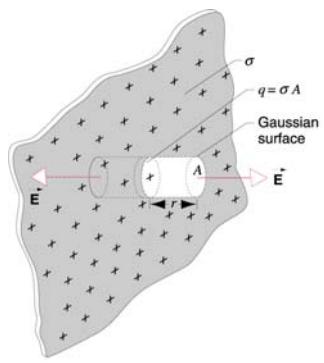
27.07

Infinite line of charge



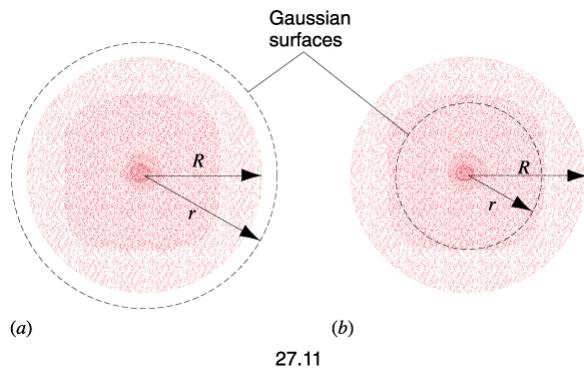
27.08

Infinite sheet of charge



27.09

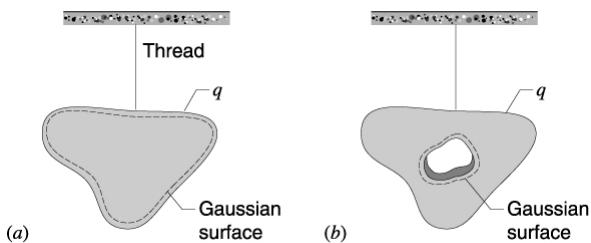
Spherical distribution of charge



(a) (b)

27.11

Gauss' law and conductors



(a)

(b)

27.14