PHYS102 - Charge and Force

Dr. Suess

January 10, 2007

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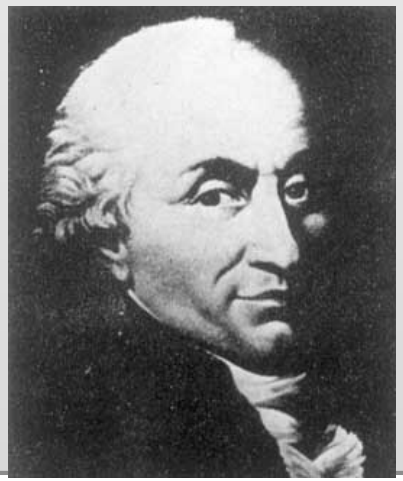
Thank you Mr. Charles Augustin Coulomb:



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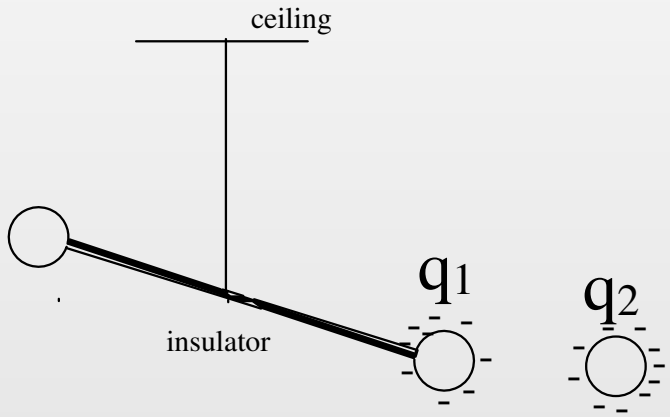

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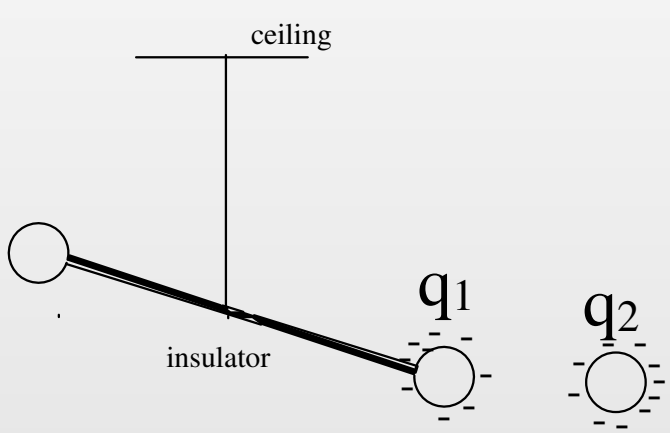

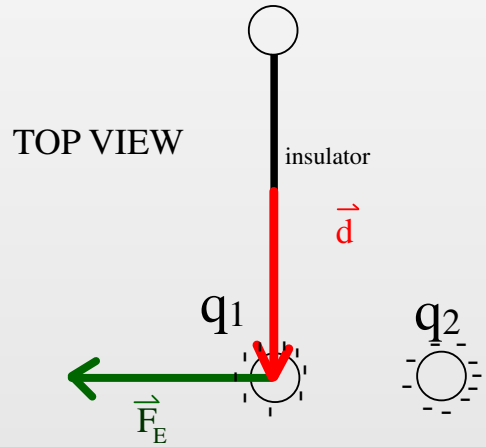

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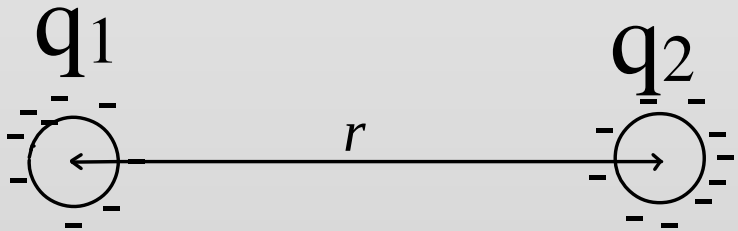

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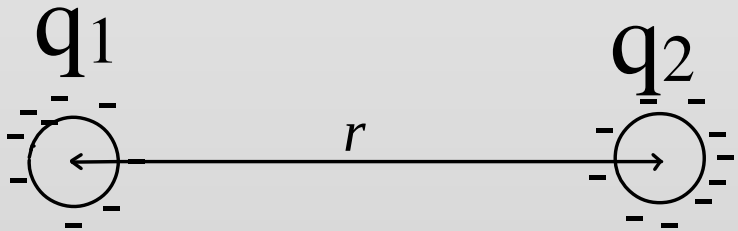

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where $\epsilon_0 = 8.85 \times 10^{-12}\, C^2\, N^{-1}\, m^{-2}$ is called the "permittivity of free space".

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  - The direction is later implied by the attractive or repulsive behavior between the charged particles.

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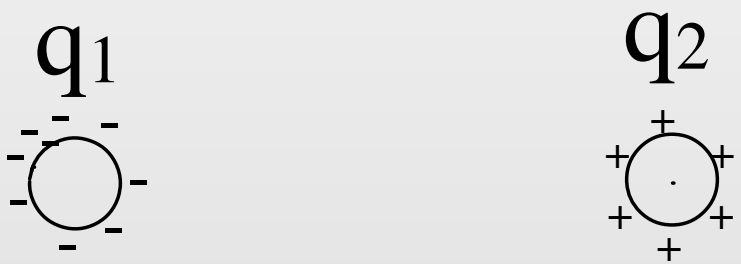

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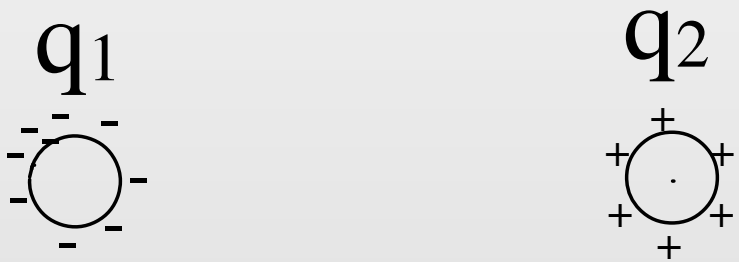

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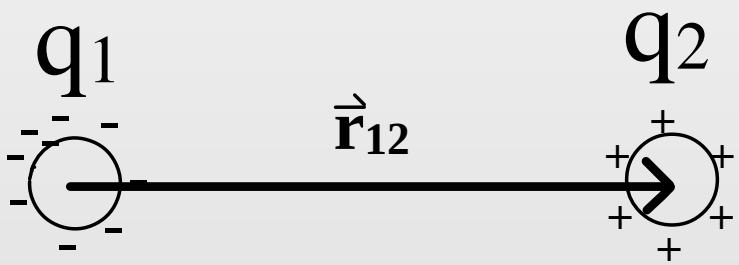

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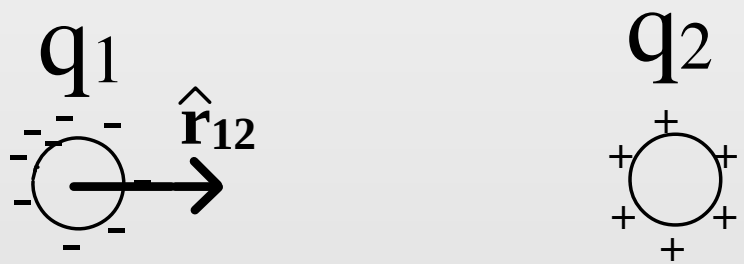

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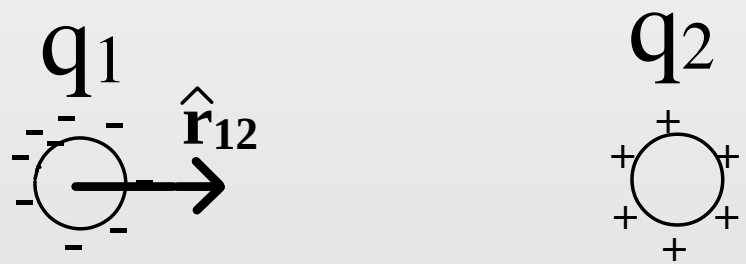

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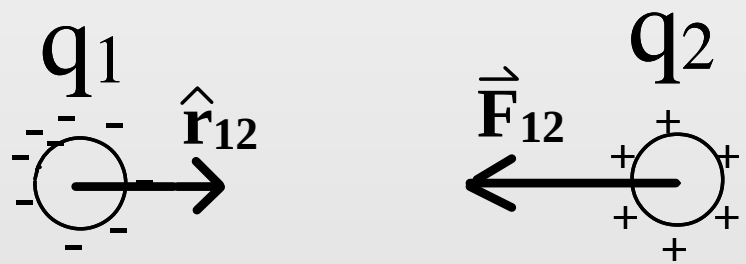

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NOTE: $\vec{F}_{21}$ and $\vec{F}_{12}$ form an action reaction-pair as explicit in Coulomb's law.