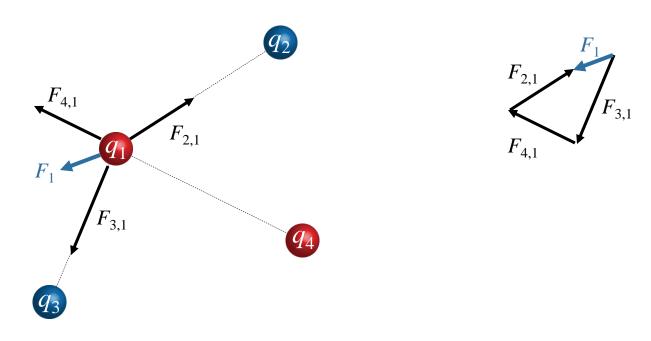
## Superposition:

If there are more than two charges present, the total force on any given charge is just the vector sum of the forces due to each of the other charges:



$$\vec{F}_1 = \vec{F}_{2,1} + \vec{F}_{3,1} + \vec{F}_{4,1} + \dots$$