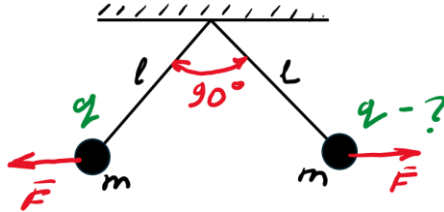


Homework 23.

Electrostatics

1. Two identically charged spheres of mass m , suspended from the same point by threads of length l , move apart so that the angle between the threads becomes a right angle. Determine the charge q of the spheres. Complete the force diagram.



2. Suppose it were possible to separate the charges in 1 cm^3 of water into positive and negative charges, and then move them 100 km apart. With what force would these charges attract each other?