

P1.W – Electrostatics

1. What is the difference between induction and charging by conduction?
2. How does the force between charged objects vary with separation?
3. What is an equipotential surface? Can two equipotential surfaces intersect?
4. Describe a Faraday ice pail. What happens if a charge object is placed in the pail?
5. What does an electrometer measure? What happens when the ZERO button on the electrometer is pressed?
6. What are the charge and charge density on the surface of a conducting sphere of radius $r = 0.15$ m if its potential is $V = 200$ V