

Source: [KBPhysicsMasterIndex](#)

#ret #question

- Electrostatics
    - Charged plates for 31 August 2020
      - Q: Charges are applied to plates, but no charge flows. It just creates electrostatic fields which causes charges to flow in the neutral conductor.
      - Q: With the charged plates, if there was no neutral conductor, would the field stay uniform? (Because there is no equilibrium to be reached)
        - A: Yes, there is no movement and no equilibrium. The field is uniform.
      - Q: Where exactly is the  $E_{net} = 0$  range in the central neutral conductor with hole? Does it extend outside, since the charges have flowed within the conductor to make it neutral?
        - A: No, the field still exists between the plate and the conductor because there is still a charge difference. The inside of the conductor has a counteracting field, but between the conductor and the plate is just a smaller version of two charged plates creating an Efield.  
20phys201srcConductorNeutralizesField.png 20phys201srcConductorAsChargedPlate.png
    - Vandegraph
      - How does the ground comb keep depositing charge onto the rubber belt?
      - How does a spark / lightning create sound?
        - plasma is much harder so the air expands and then contracts. we hear the air particles slamming into each other.
      - Why is the belt on a vandegraph generator so long?
        - Probably to keep the ball away from the base
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