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
