

## ADVANCED PHYSICS CLUB

APRIL 28, 2019

### TODAY'S MEETING

Today we continued the discussion of electrostatics and the Gauss Law.

First we solved some homework problems from the previous session.

Then we covered two topics

- The electric field from an infinite wire with a uniform charge distribution.
- The electric field from an infinite plane with a uniform charge distribution.

Then we learned a little bit about the method of images. We introduced the concept of a grounded infinite plane and learned what happens when one brings a point charge near such an infinite plane. We calculated the charge distribution on the plane using the method of images and the Gauss Law.

### HOMEWORK

1. Calculate the total net charge on the infinite plane.
2. Understand what happens if one brings a charge near a grounded sphere. (Hint: use the method of images.)

### FOR THE NEXT MEETING

**There will be no more club meetings this academic year.** We are looking forward to meeting you in September/October, 2019. Have a very nice Summer!