**Transformed E&M I materials**

**Method of Images**

**(Griffiths Chapter 3)**

**TIMELINE**

Prof A covers this in lectures 12,13.

Prof B. covers this in lecture 13.

Transformed course covered in lectures 13,14.

**LEARNING GOALS**

1. Students should realize when the method of images is applicable and be able to solve simple cases.
2. Students should be able to explain the difference between the physical situation (surface charges) and the mathematical setup (image charges).

**CLASS ACTIVITIES**

**Method of Images**

**Whiteboards**

**Method of Images**

I set up the "method of images" problem (with +Q above, and -Q below), and had THEM, in pairs, write the formula for V(x,y,z). (They struggled surprisingly with this!) I then had them evaluate V(x,y,0) and V(anything -> infinity). Lastly, I had the faster groups work out Ex, Ey, and/or Ez, and evaluate it on the plane.

**Writing**

**What is Method of Images?**

I posted this "On paper (don’t forget your name!) in your own words (by yourself):What is the idea behind the method of images? What does it accomplish?What is its relation to the uniqueness theorem?" and collected their answers.