

CONTINUOUS CHARGE DISTRIBUTIONS AND MATTER IN ELECTRIC FIELDS

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8/30/2010

Supplementary Material for
PHY1308 (General Physics -
Electricity and Magnetism)

ANNOUNCEMENTS

- Homework 2:

- Assigned today, due next Tuesday by 5pm

- _ place in my mailbox in Fondren Science 102
 - _ grader will pick up at 5 sharply. Anything later than that gets a zero.

- Bonus problem!

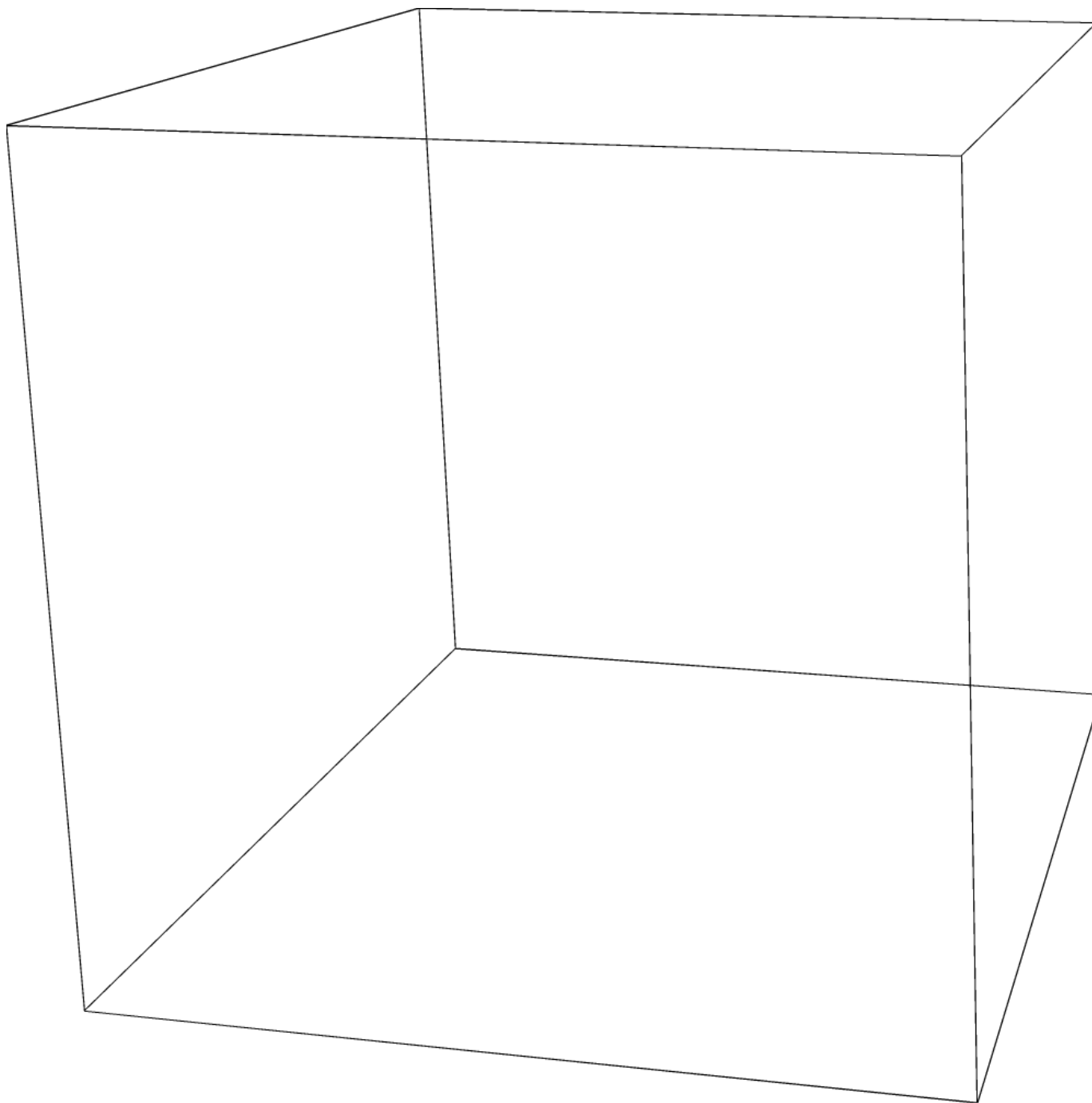
- _ based on the "Electric Field Hockey" PhET simulator
 - _ read the rules carefully!
 - _ first place gets +15 points on the next in-class exam. Second place gets +10. Third place gets +5. Working in teams is encouraged, but you share the points.

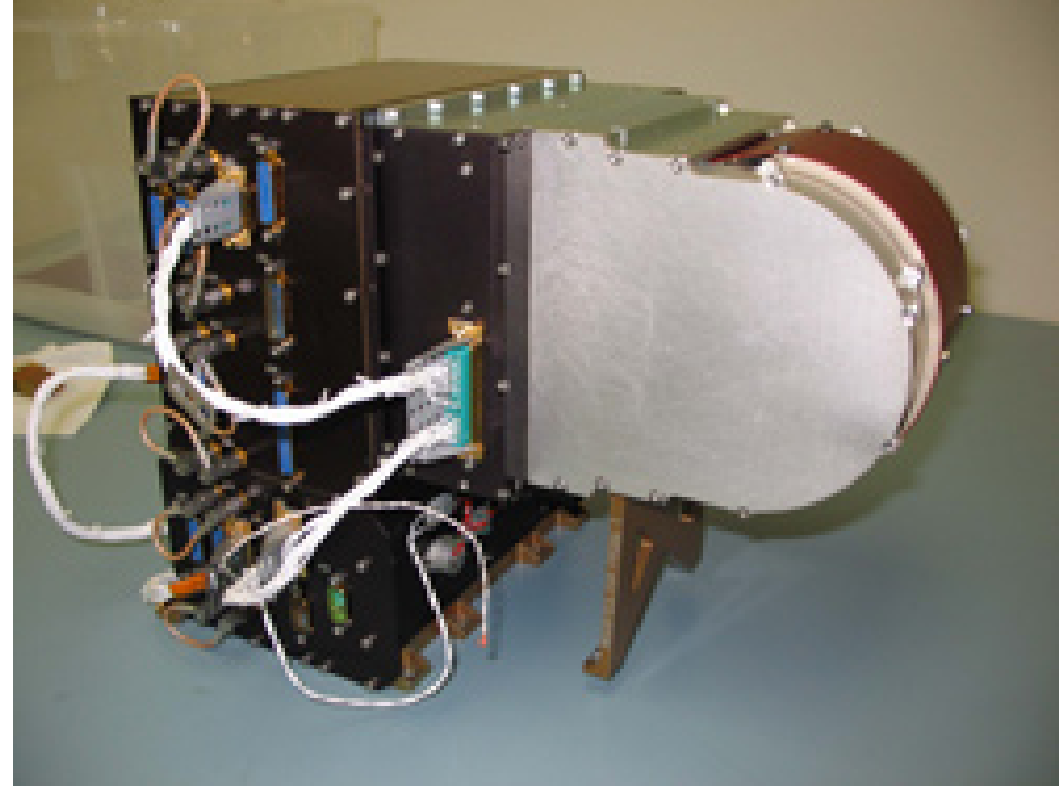
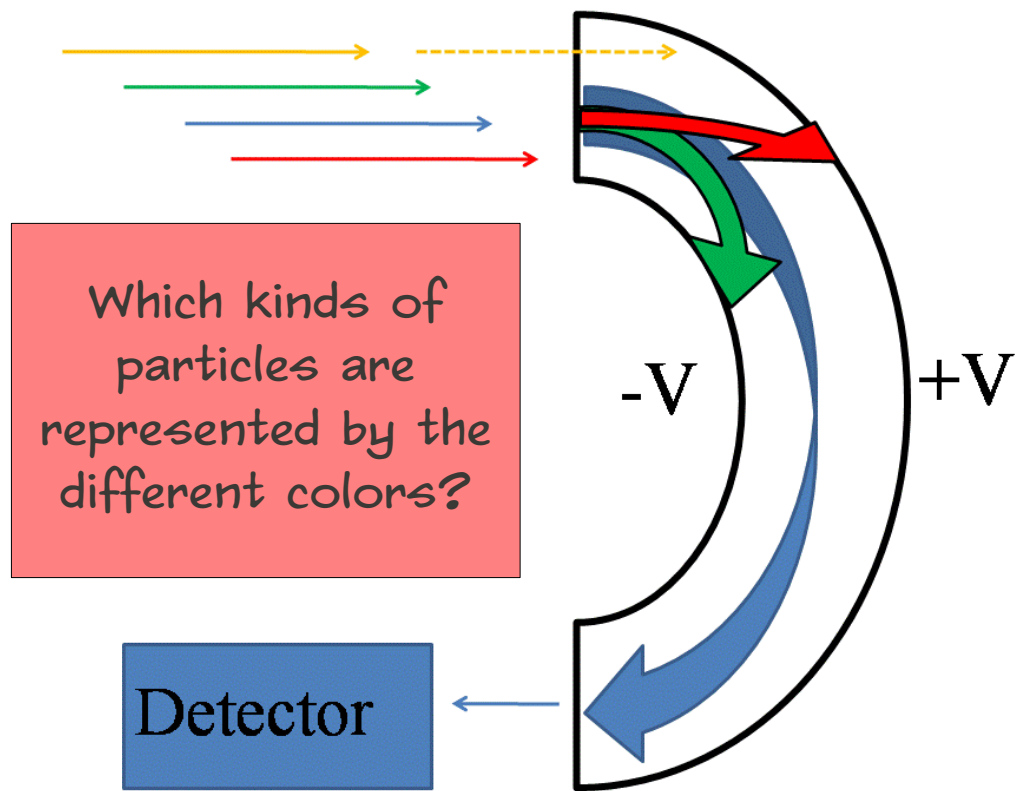
- First official in-class Quiz

- Friday! Based on the problems and concepts from Homework 1.
 - Bring pens/pencils and calculator

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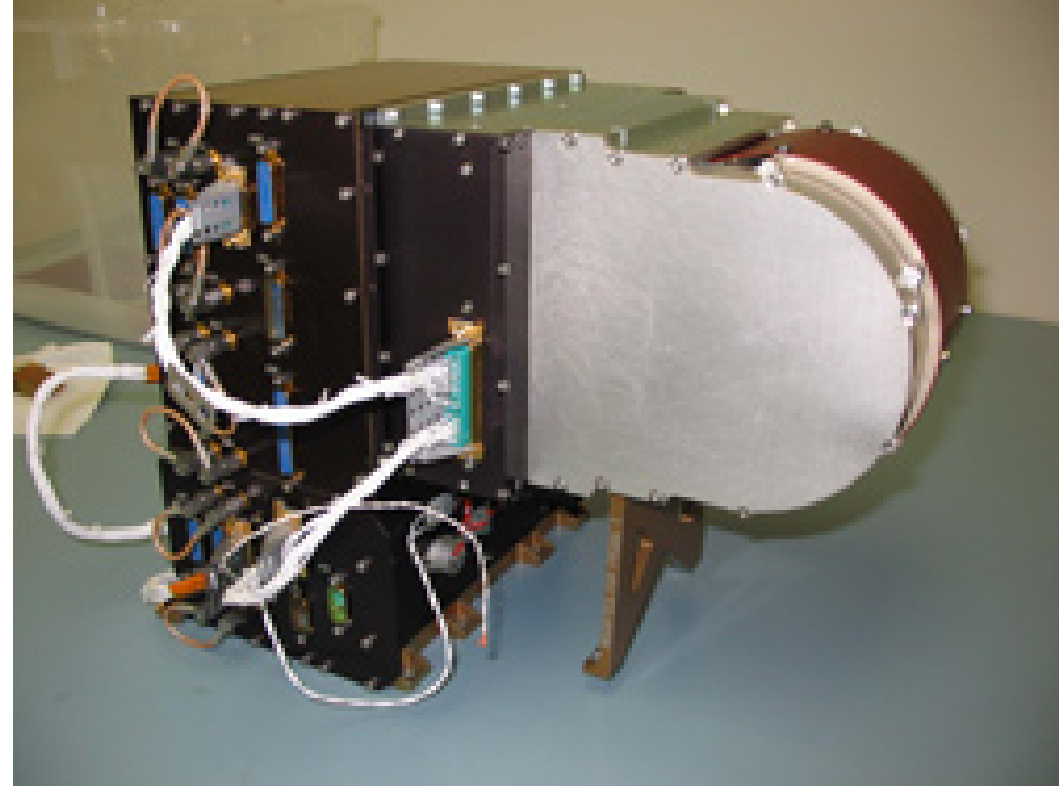
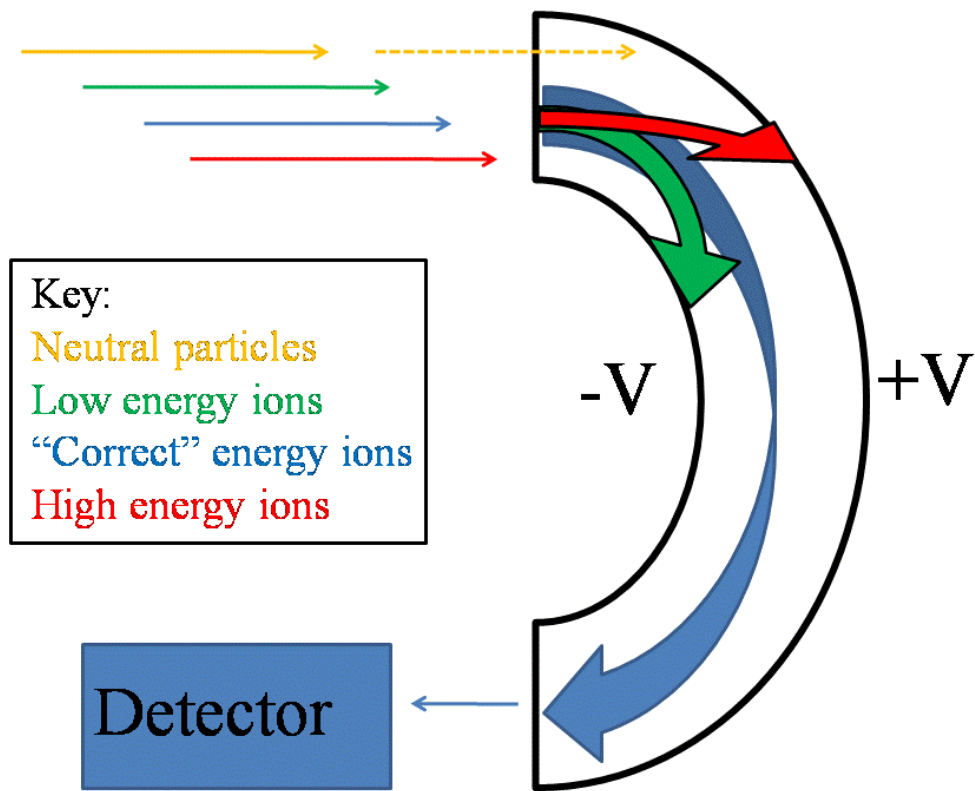
- Cube
- Electrostatic Analyzer
- Dipole in Uniform Electric Field
- Near-death by dipole
 - breathing and dipoles in non-uniform electric fields (van der Waals forces)





Electrostatic analyzer:

- can be found in material analysis equipment (e.g. for the study of atomic composition of material)
- common in space instrumentation (e.g. space weather satellites)



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DIPOLE IN ELECTRIC FIELD

