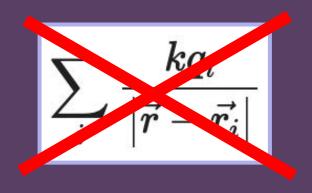
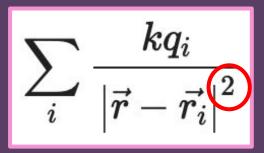
# PH 366 Day 9: Midterm Mini-Project, Day 2/2

5 Feb 2025

## **Data File Error**

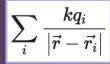
Data represents a quantity not quite the same as electric potential

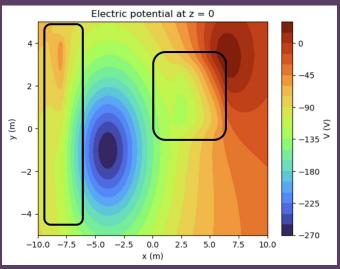


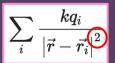


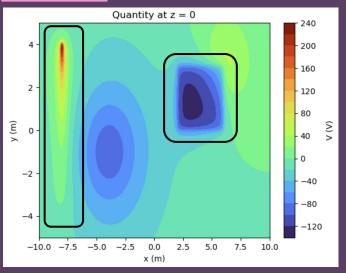
### **Data File Error**

We are keeping the same data files – they show effects of charges much more clearly

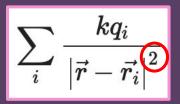








#### Data File Error



Use quantity\_xy function, or just modify vxy manually

```
def quantity_xy(x, y, charges, positions):
quantity = 0
for i in range(len(charges)):
    qi = charges[i]
    rix = positions[i][0]
    riy = positions[i][1]
    riz = positions[i][2]
    quantity += k * qi / ((x - rix) ** 2 + (y - riy) ** 2 + riz ** 2)
return quantity
```

### Reminder

#### some quantity

"Your main goal is to use the provided electric potential data to detect the values of existing charges and where they are located in 3D space"

- You don't need to figure out exact charge locations
- You do need to explain your reasoning for your prediction, evaluate how close you got, and show your work, regardless of how "complete" you feel like your solution is