

# $\begin{array}{c} \textbf{Report for Experiment } \# \textbf{N} \\ \textbf{Lab Name} \end{array}$

Name
Lab Partner: Name
TA: Name
Date

### **Abstract:**

Summarize motivation and main results.

#### **Introduction:**

Equations:

$$\vec{\nabla} \cdot \vec{E} = \frac{\rho}{\varepsilon_0} \tag{1}$$

$$\vec{\nabla} \cdot \vec{B} = 0 \tag{2}$$

$$\vec{\nabla} \times \vec{E} = -\frac{\partial \vec{B}}{\partial t} \tag{3}$$

$$\vec{\nabla} \times \vec{B} = \mu_0 \left( \vec{J} + \varepsilon_0 \frac{\partial \vec{E}}{\partial t} \right) \tag{4}$$

#### Investigation n:

$$\vec{F}_E = \frac{1}{4\pi\varepsilon_0} \frac{qQ}{r^2} \hat{r} \quad \rightarrow \quad \vec{E} = \frac{1}{q} \vec{F} \quad \rightarrow \quad \vec{E} = \frac{1}{4\pi\varepsilon_0} \frac{Q}{r^2} \hat{r}$$

$$\uparrow \qquad \qquad \downarrow \qquad \qquad \downarrow$$

$$\vec{F}_E = -\vec{\nabla}\Delta U \qquad \qquad \Delta V = -\int_C \vec{E} \cdot d\vec{l}$$

$$\Delta U = \frac{1}{4\pi\varepsilon_0} \frac{Qq}{r} \quad \leftarrow \quad \Delta U = q\Delta V \quad \leftarrow \quad \Delta V = \frac{1}{4\pi\varepsilon_0} \frac{Q}{r}$$

Figure 1: Random Table

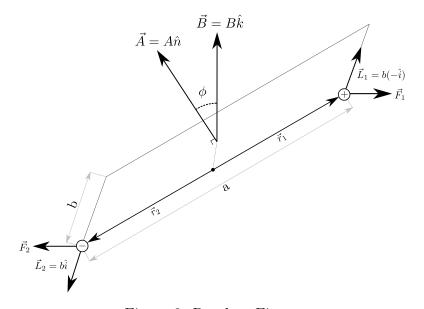


Figure 2: Random Figure

```
def fibonacci(n):
    if n <= 1:
        return n
    else:
        return(fibonacci(n-1) + fibonacci(n-2))</pre>
```

Figure 3: Random Code

## Conclusion:

## Questions:

1. Question 1

## References:

- 1. Table Generator  $\LaTeX$  , helpful if converting Excel Data
- 2. Northeastern IPL Straight Line Fit Calculator