

## In-Class Assignment

PHY 2105 (A)

### Assignment III

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1. Justify that the dielectrics should not conduct current to construct a capacitor.
2. Analyze the following figure to evaluate the charge on (a) capacitor 1, (b) capacitor 2, (c) capacitor 3, and (d) capacitor 4 if only switch  $S_1$  is closed. If both switches are closed, what is the charge on (e) capacitor 1, (f) capacitor 2, (g) capacitor 3, and (h) capacitor 4.

