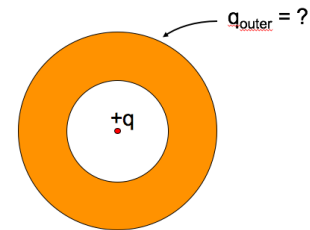## TUTORIAL TODAY

- Click 'A' once you finish page 1
- Click 'B' once you finish page 2
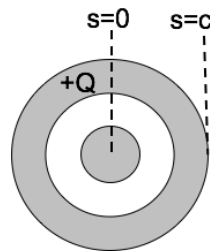- Click 'C' once you finish page 3

A neutral copper sphere has a spherical hollow in the center. A charge $+q$ is placed in the center of the hollow. What is the total charge on the outside surface of the copper sphere? (Assume Electrostatic equilibrium.)

q_{outer} = ?

$+q$

A. Zero
B. $-q$
C. $+q$
D. $0 < q_{outer} < +q$
E. $-q < q_{outer} < 0$

A long coax has total charge $+Q$ on the OUTER conductor. The INNER conductor is neutral.

What is the sign of the potential difference, $\Delta V = V(c) - V(0)$, between the center of the inner conductor ($s = 0$) and the outside of the outer conductor?

s=0   s=c

$+Q$

A. Positive
B. Negative
C. Zero