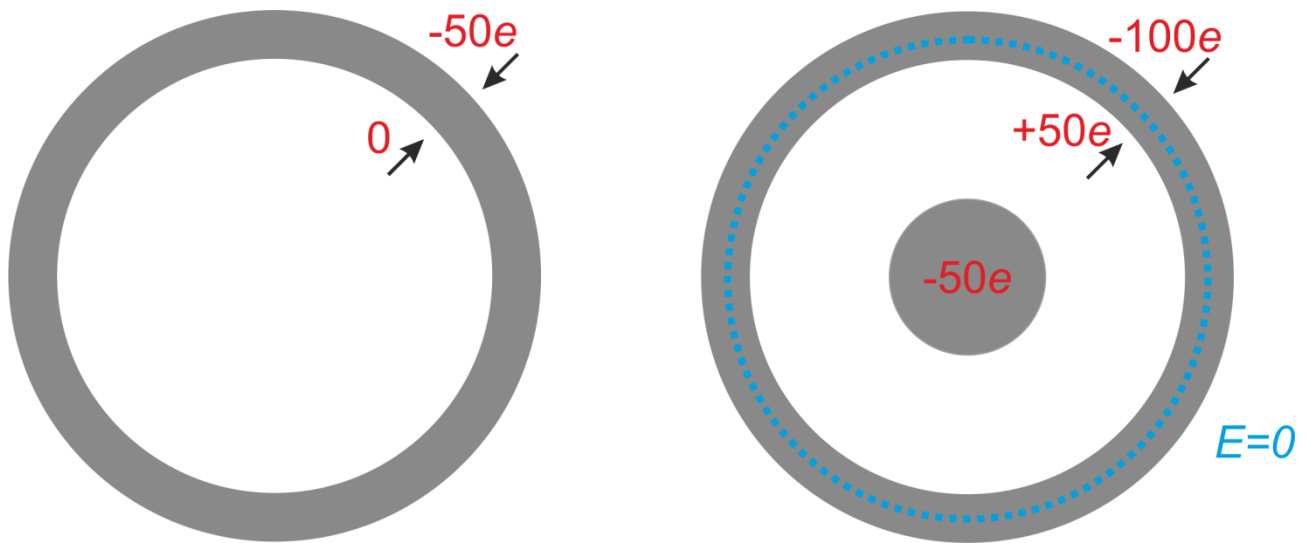


### Answer on Question #73598 Physics / Electric Circuits

A ball with charge  $-50e$  is placed at the center of a hollow spherical shell has a net charge of  $-50e$ . What is the charge on the shell's outer space?

**Solution:**



Since the spherical shell is a conductor, the electric field inside shell is equal to zero. So the net charge inside spherical shell must be zero too. Thus the charge on the shell's inner space is  $+50e$ . Because the total charge of the shell is  $-50e$ , the charge on the shell's outer space is  $-100e$ .

**Answer:**  $-100e$

Answer provided by <https://www.AssignmentExpert.com>