

PHYS 3740 In Class Group Discussion

Constructive interference

A beam of electrons strikes a barrier with two narrow, but equal-width slits. A screen is located beyond the barrier, and electrons are detected as they strike the screen. The “center” of the screen is the point equidistant from the slits. When either slit alone is open, 10 electrons arrive per second in a very small region at the center of the screen. When both slits are open, how many electrons will arrive per second in the same region at the center of the screen?