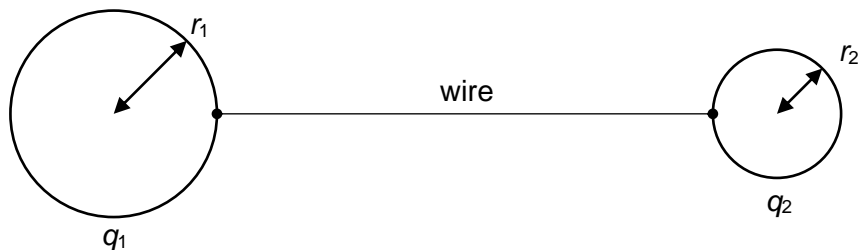


- 18** Two spherical conductors of radii r_1 and r_2 are separated by a distance much greater than the radius of either sphere. The spheres are connected by a conducting wire as shown in the diagram below. The charges on the spheres in equilibrium are q_1 and q_2 respectively.



What is the ratio of the magnitudes of the electric field strengths at the surfaces of the spheres?

- A** $\left(\frac{r_2}{r_1}\right)^2$
- B** $\frac{r_2}{r_1}$
- C** $\frac{q_2 r_2}{q_1 r_1}$
- D** $\frac{q_1 r_2}{q_2 r_1}$