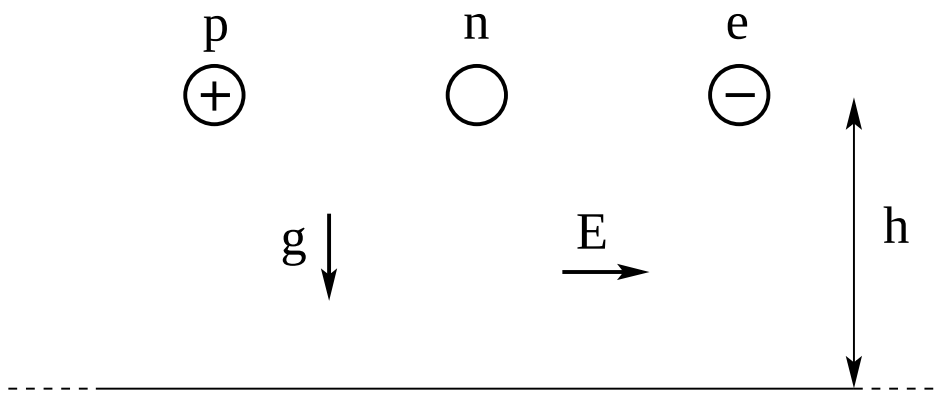
Particle in Uniform Electric and Gravitational Field (1)

A proton, a neutron, and an electron are dropped from rest in a vertical gravitational field $\vec{g}$ and in a horizontal electric field $\vec{E}$ as shown. Both fields are uniform.



(a) Which particle travels the shortest distance?

(b) Which particle travels the longest distance?

(c) Which particle travels the shortest time?

(d) Which particle reaches the highest speed?

Particle in Uniform Electric and Gravitational Field (2)

A proton, a neutron, and an electron are dropped from rest in a vertical gravitational field $\vec{g}$ and in a horizontal electric field $\vec{E}$ as shown. Both fields are uniform.

(a) Which particle travels the shortest distance?
(b) Which particle travels in a straight line?
(c) Which particle travels the shortest time?
(d) Which particle reaches the highest speed?