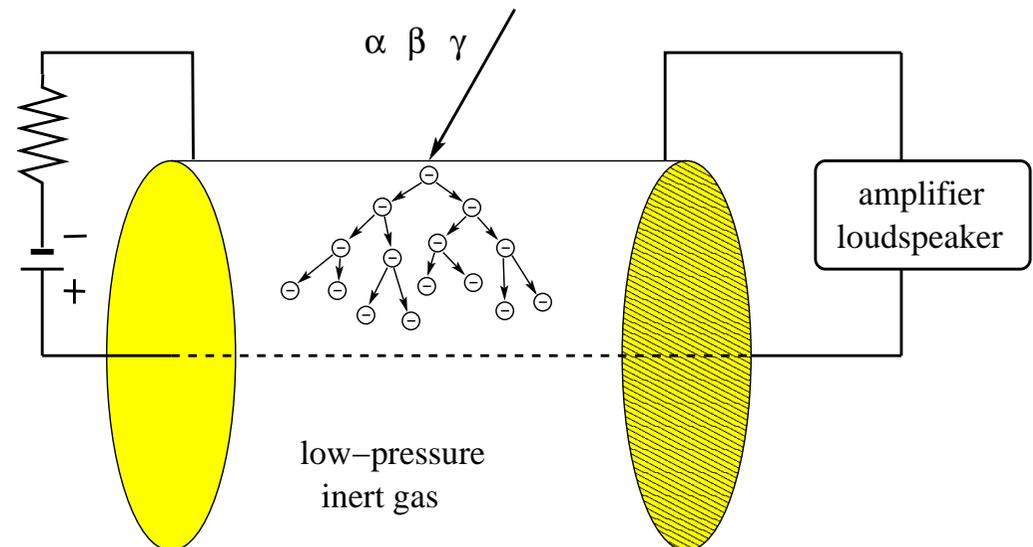


Geiger Counter



Radioactive atomic nuclei produce high-energy particles of three different kinds:

- α -particles are ${}^4\text{He}$ nuclei.
- β -particles are electrons or positrons.
- γ -particles are high-energy photons.



- Free electrons produced by ionizing radiation are strongly accelerated toward the central wire.
- Collisions with gas atoms produce further free electrons, which are accelerated in the same direction.
- An avalanche of electrons reaching the wire produces a current pulse in the circuit.