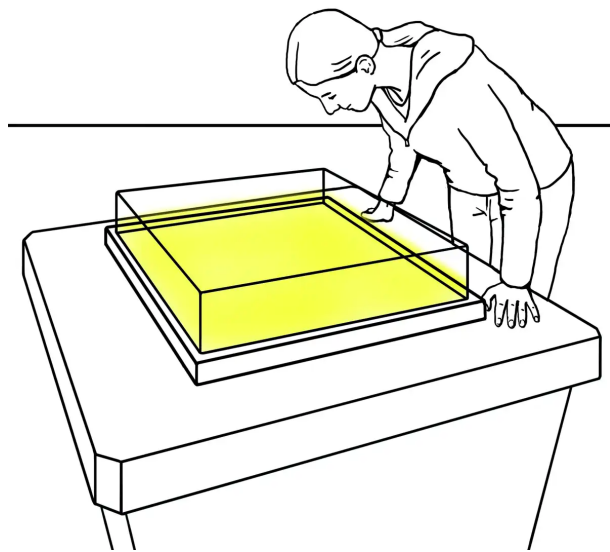


Atomic Trails

Can you see radiation?



Look at the black plate under the glass.

For the best view, look at an angle through the side.

You see cloudy trails, which vanish again slowly.

The trails are made by sub-atomic particles. As these fly through the invisible alcohol vapour in the chamber, they make it condense into a cloud. The particles are part of the natural background radiation. This comes from cosmic radiation and the natural radioactivity of the Earth.

All electrically-charged particles can be detected in the chamber: alpha particles, protons, muons, electrons and positrons. On the basis of the different trail shapes you can even distinguish them.



Fig. 1: Alpha particles (helium nuclei) show short and thick trails.



Fig. 2: Thin trails mostly derive from beta rays (electrons).