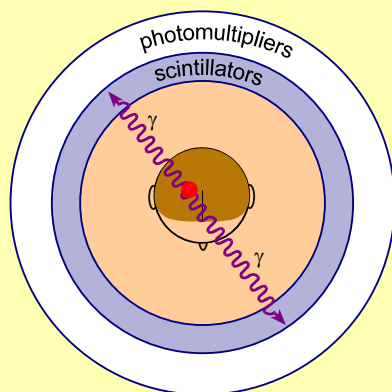
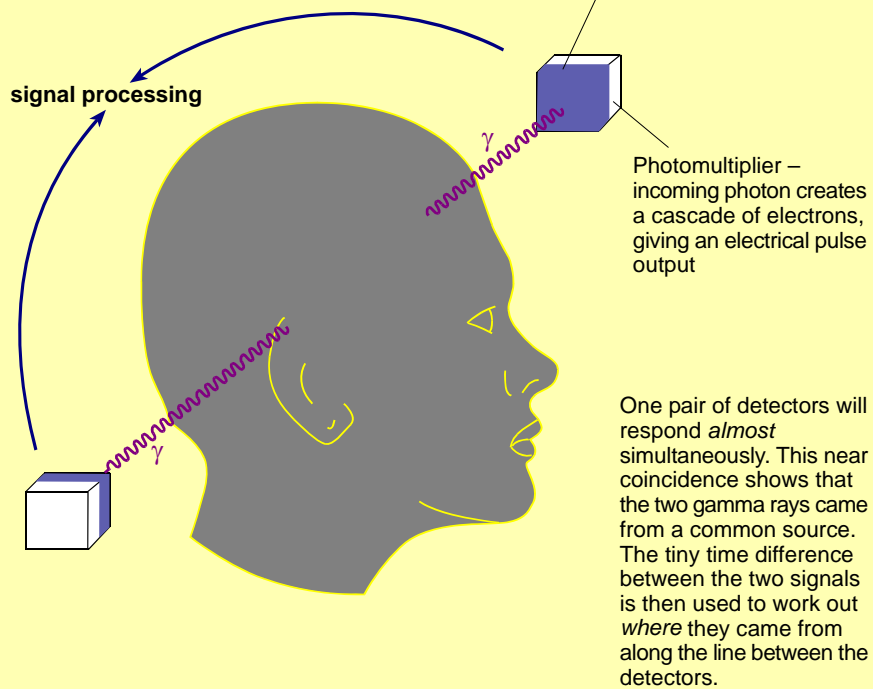


## TAP 534- 2: Making PET scans

### Making PET scans

A pair of gamma rays are emitted in opposite directions as a result of electron/positron annihilation inside the patient

Scintillator – captures gamma ray photon and emits lower energy photons into photomultiplier tubes



Scintillators are arranged in a grid on the inside surface of the scanner. In any short period of time many detectors will respond to gamma rays from many different annihilations inside the body. A computer produces a slice-by-slice map of activity in the brain.

**Practical advice**

This diagram is reproduced here so that you can discuss it with your class.

**External reference**

This activity is taken from Advancing Physics chapter 17, 200