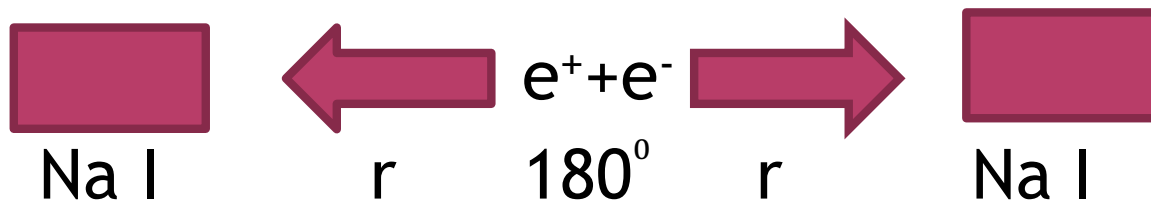


PET EMULATOR

Ya Meilin 2010.10.15

PRINCIPLE

⊙ Annihilation

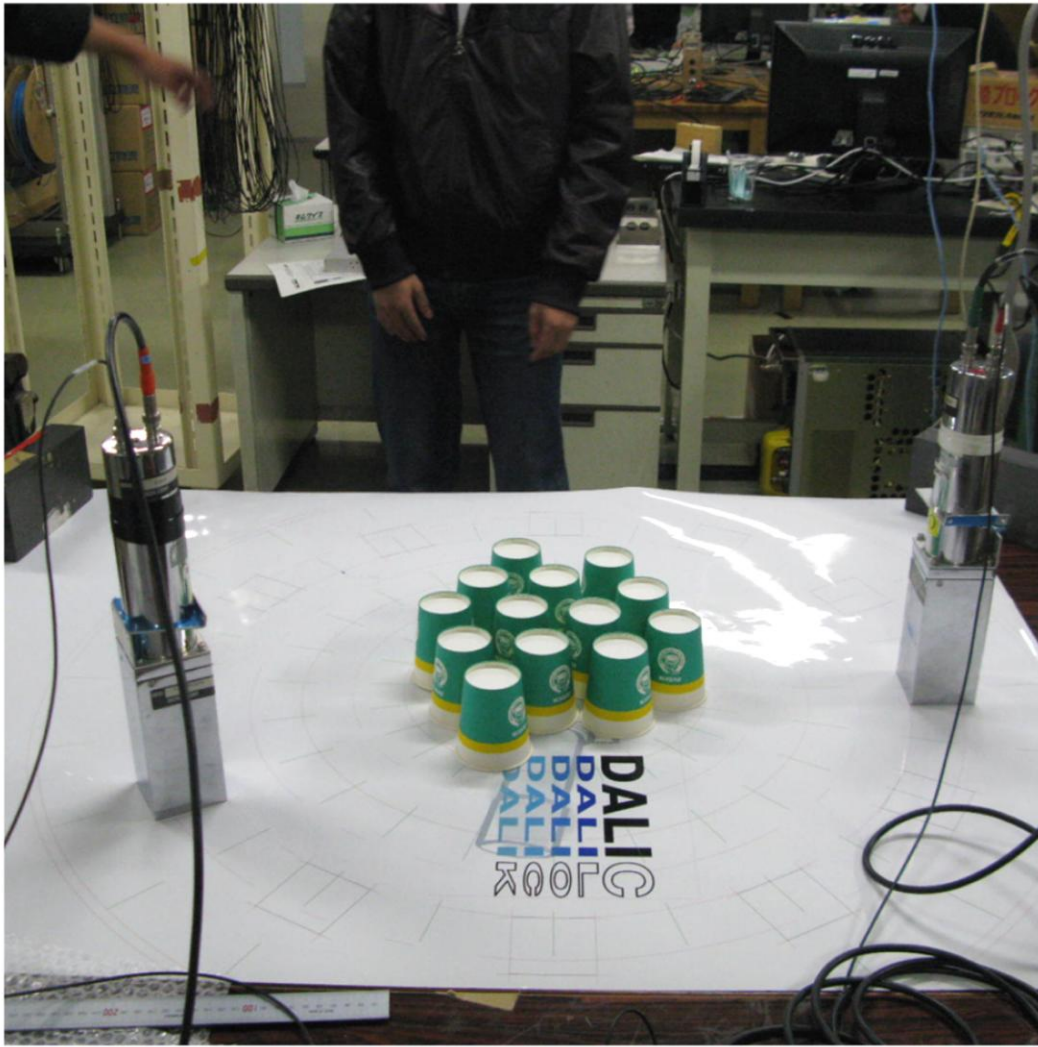


Source: ^{22}Na

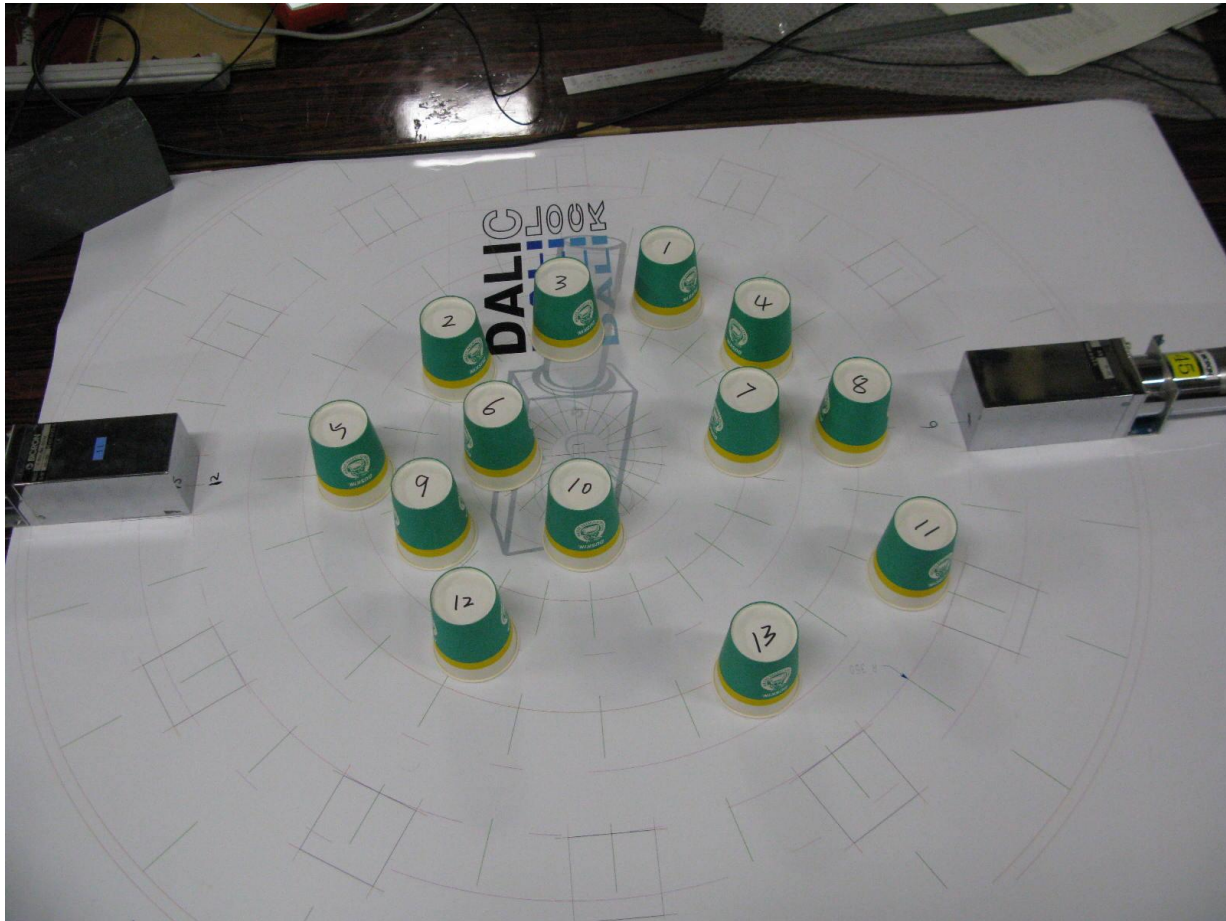
Beta decay



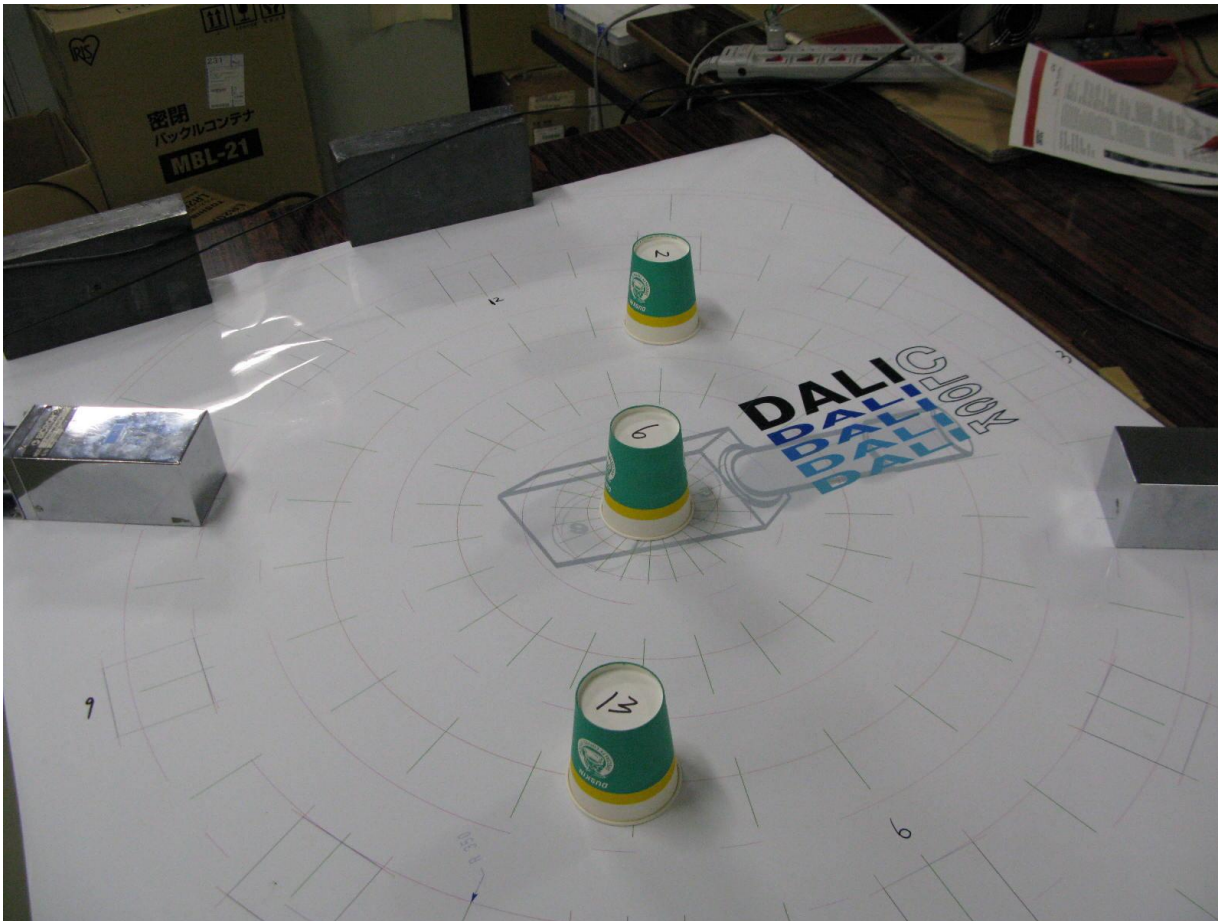
So we can detect the gamma photon



Source is in one of these cups



Two detectors lie on a line and rotate clockwise along the circle

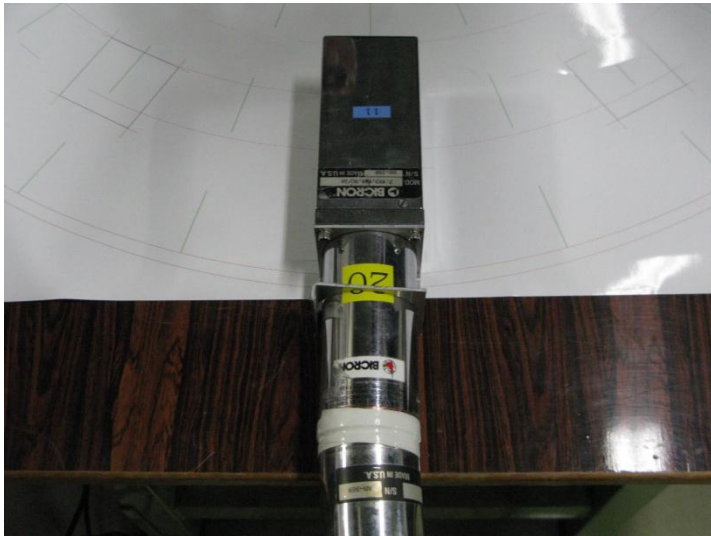


The source is on the line

INSTRUMENTS

- Two NaI Detectors

To detect the gamma rays



○ One Oscilloscope

To see the signal



Two TFA

Change the shape of signal



One 8CH Discriminator

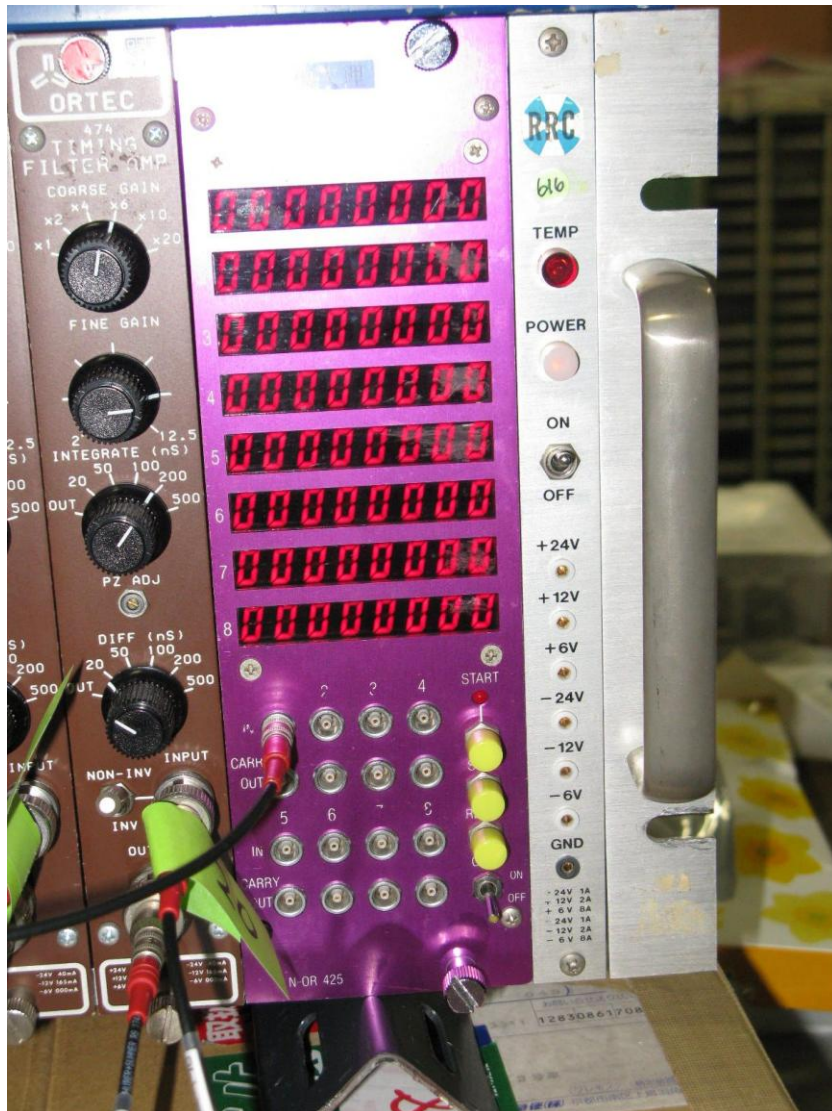
Change the signal to logic signal



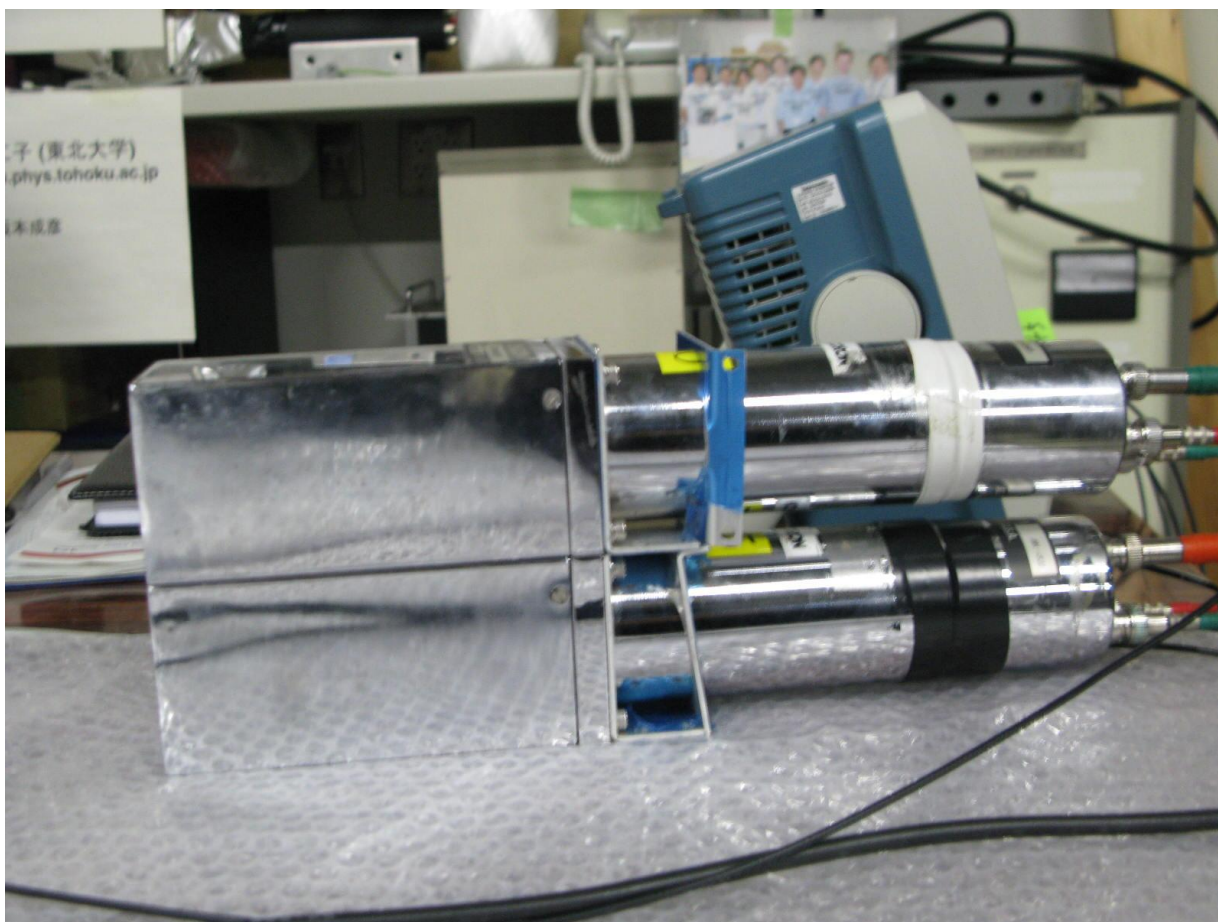
One 3CH Coincidence and HV supplier



○ One 8CH Visual Scaler



THE TEST OF MUON



Nal Detector



TFA



Nal Detector



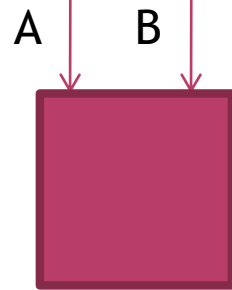
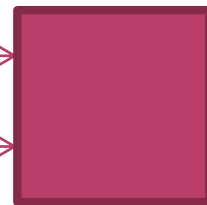
TFA



8 CH Discriminator

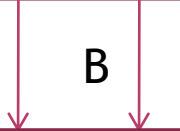


3 CH Coincidence



A

B



Oscilloscope



8 CH Visual Scaler

THANKS