

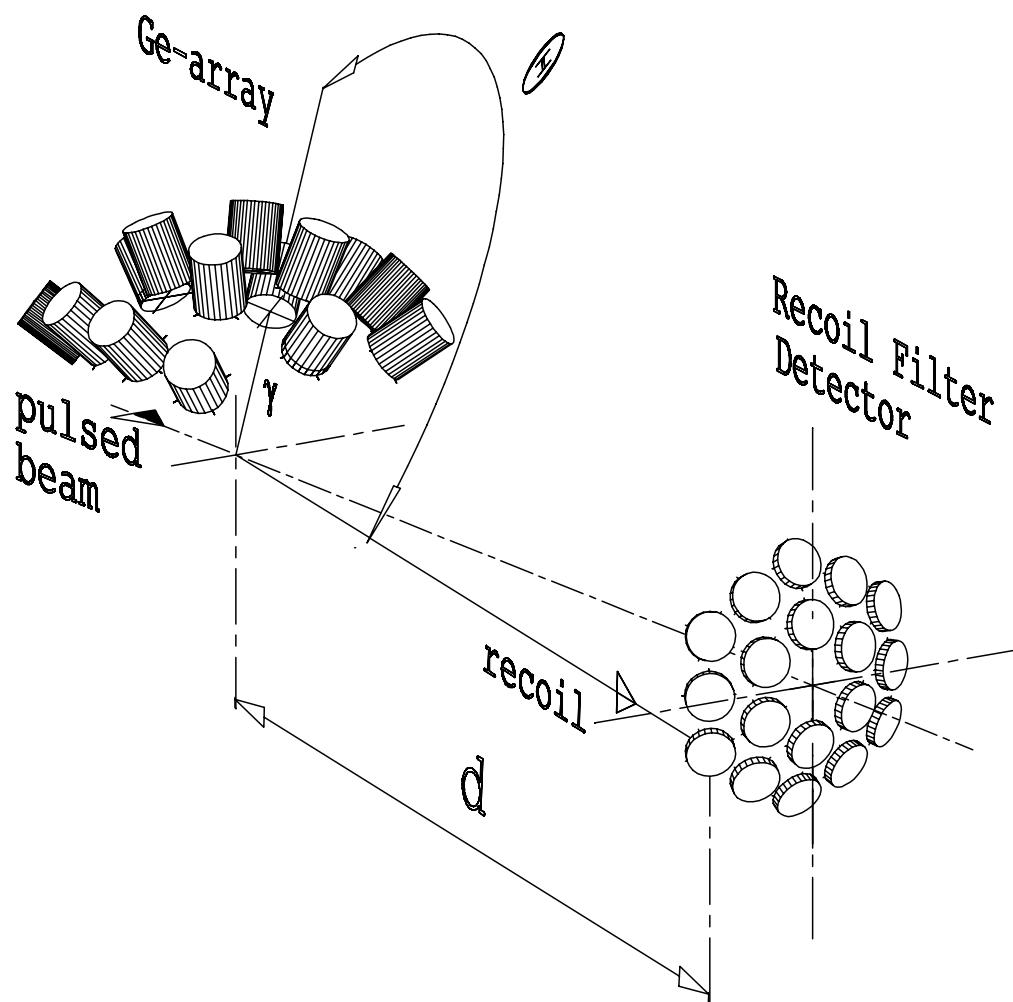
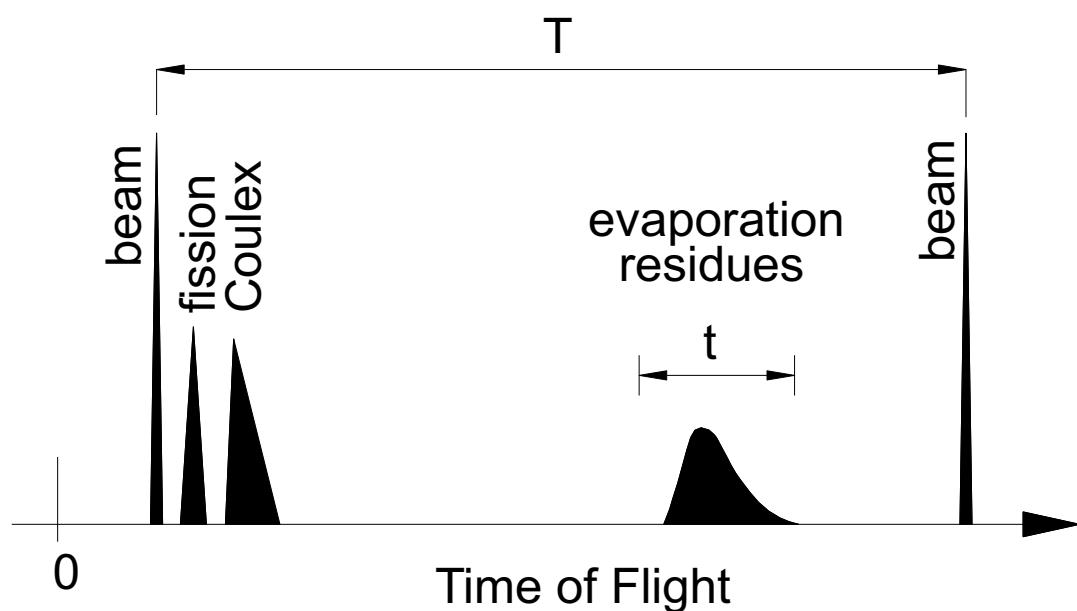
Recoil Filter Detector: latest results and possible application to conversion electron measurements

*W. Meczynski
Institute of Nuclear Physics, Kraków*

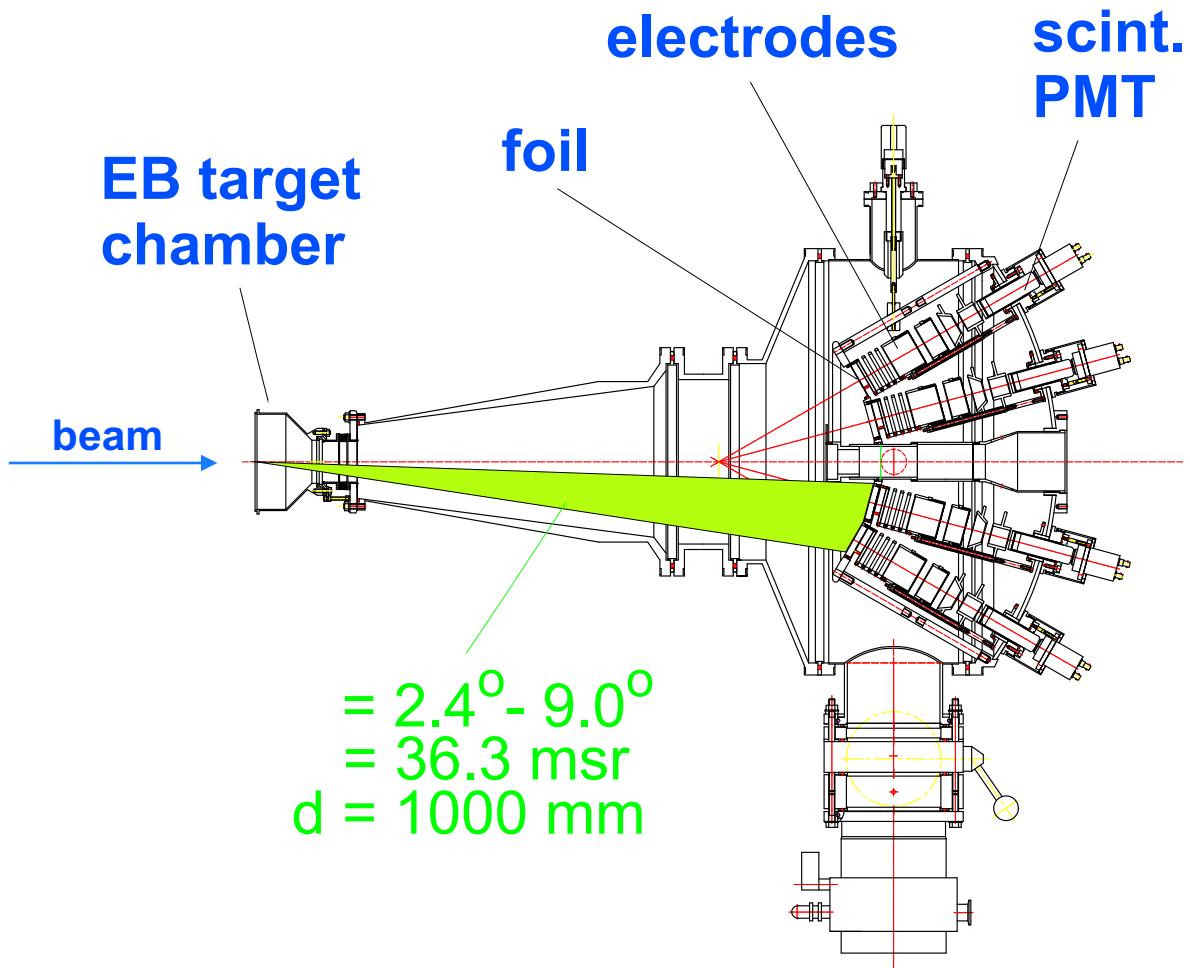
- RFD at EUROBALL IV
- latest upgrading
- example: $A = 200$

*Mini-Workshop
on
Future in-Beam Conversion Electron Spectroscopy
Helmholtz-Institut für Strahlen- und Kernphysik
Bonn, January 23 - 24, 2003*

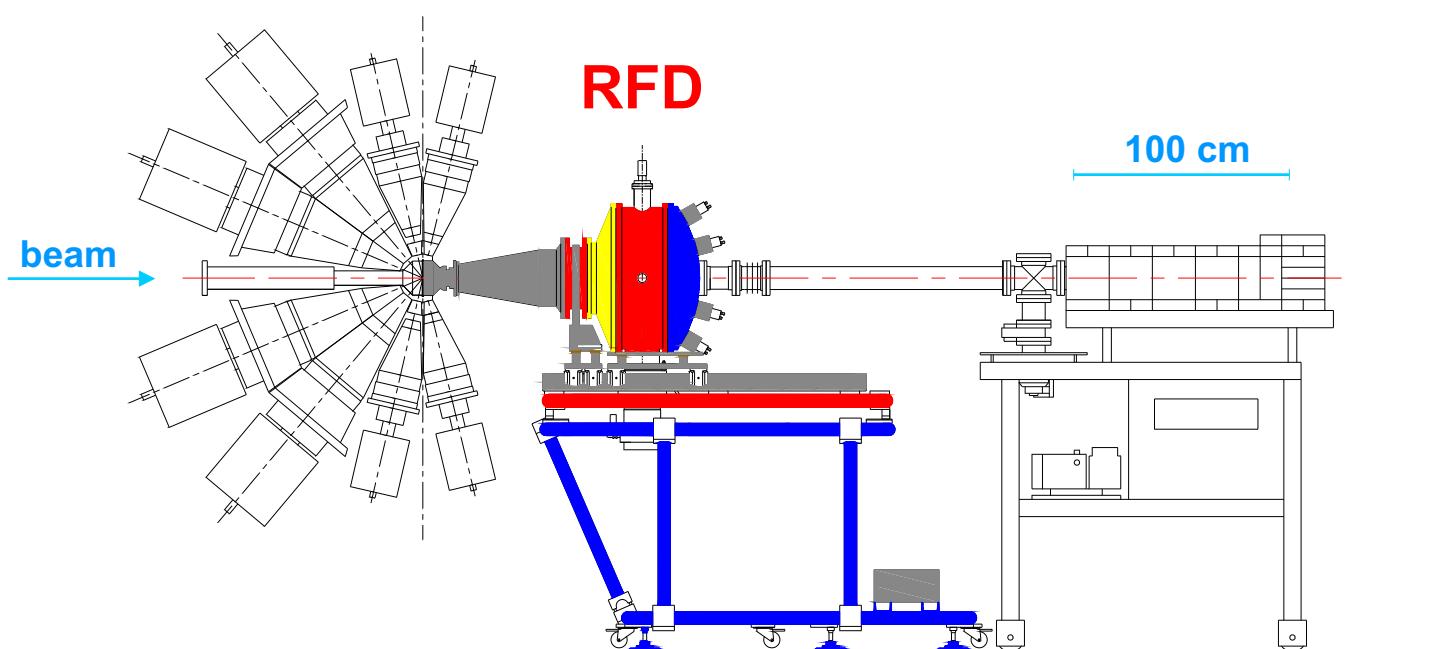
RFD - principle of operation



RFD at EUROBALL IV

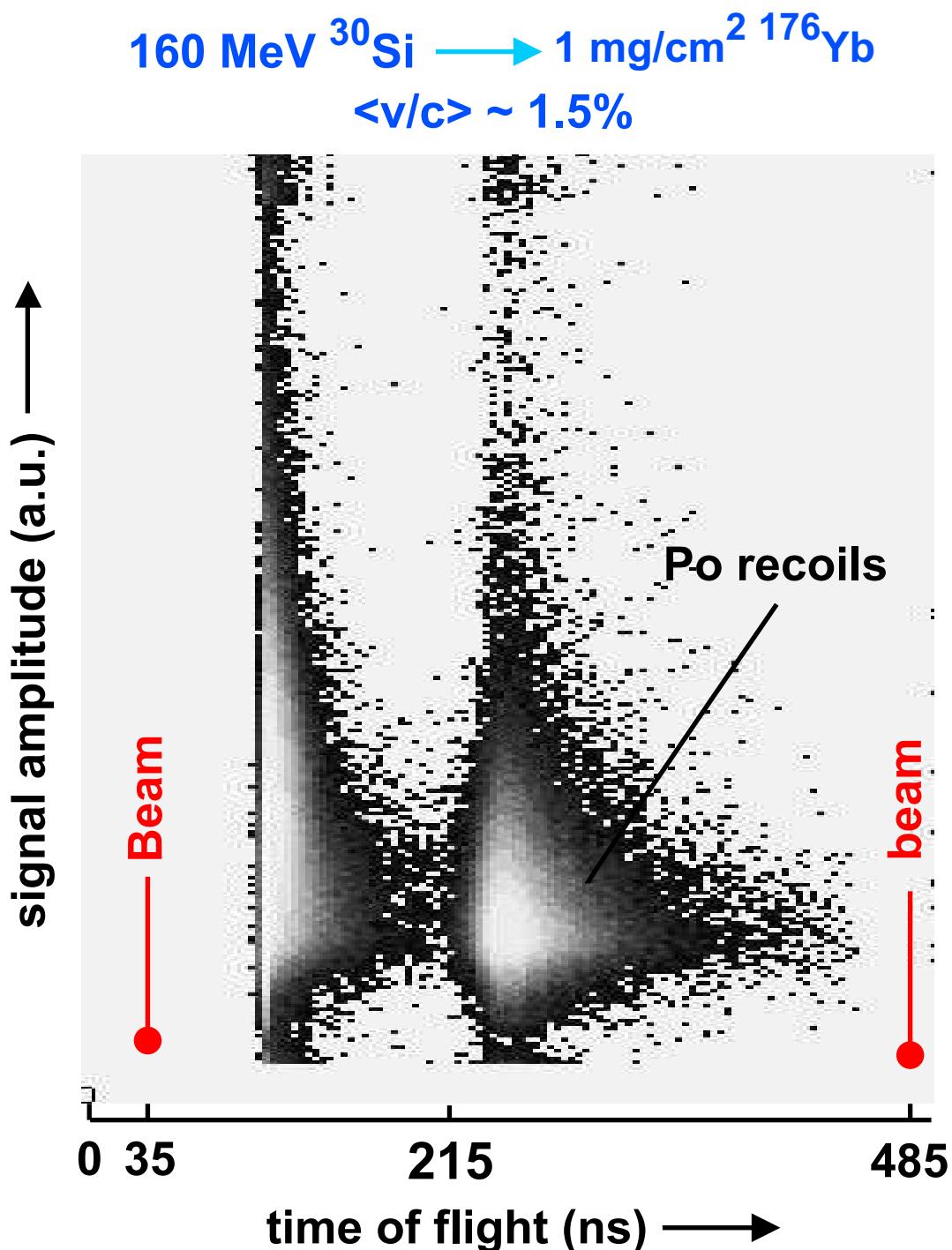


EUROBALL IV



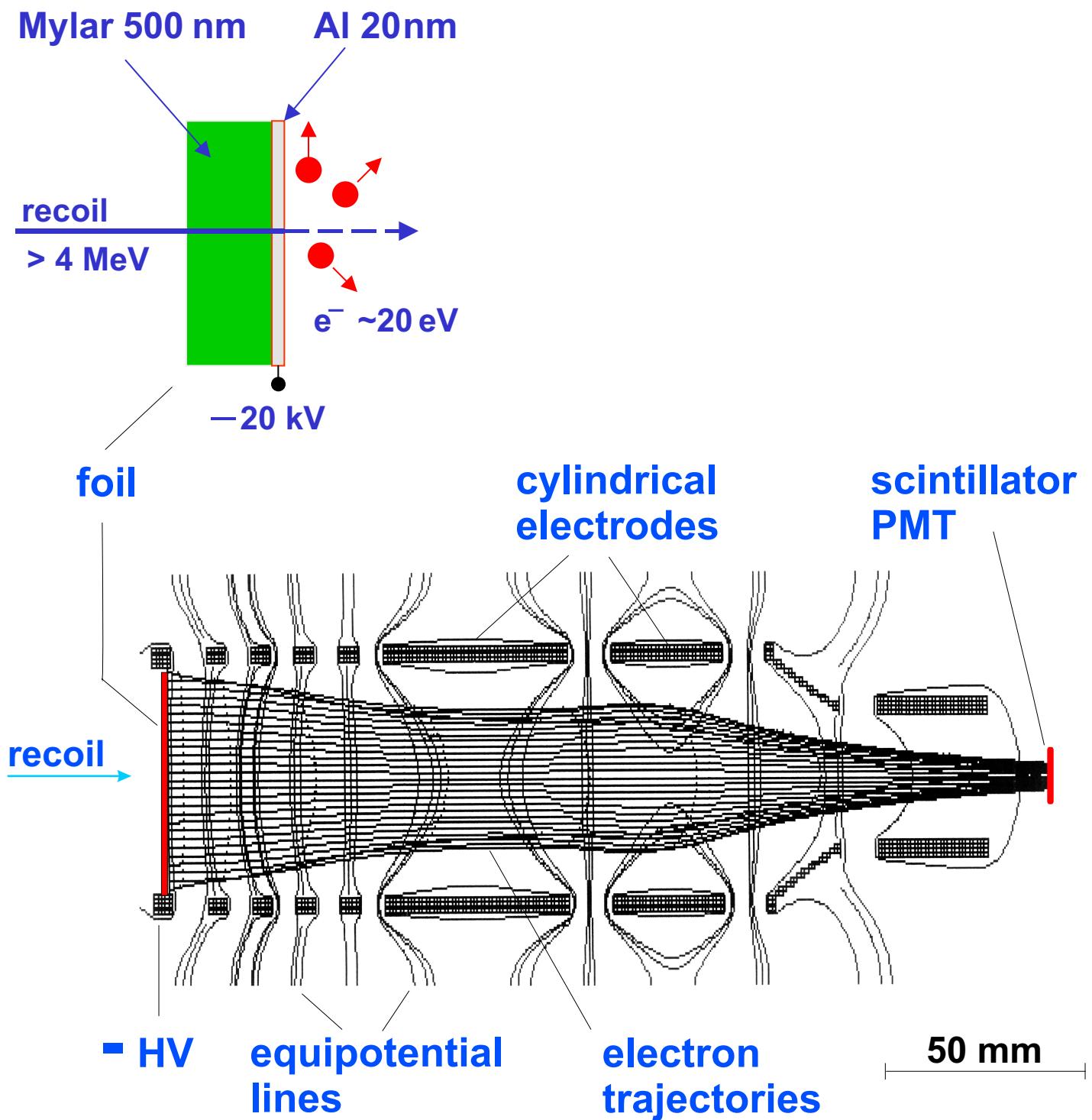
Upgrading: 2D-analysis

- new DAQ: VME standard
- 2D-analysis: background reduction



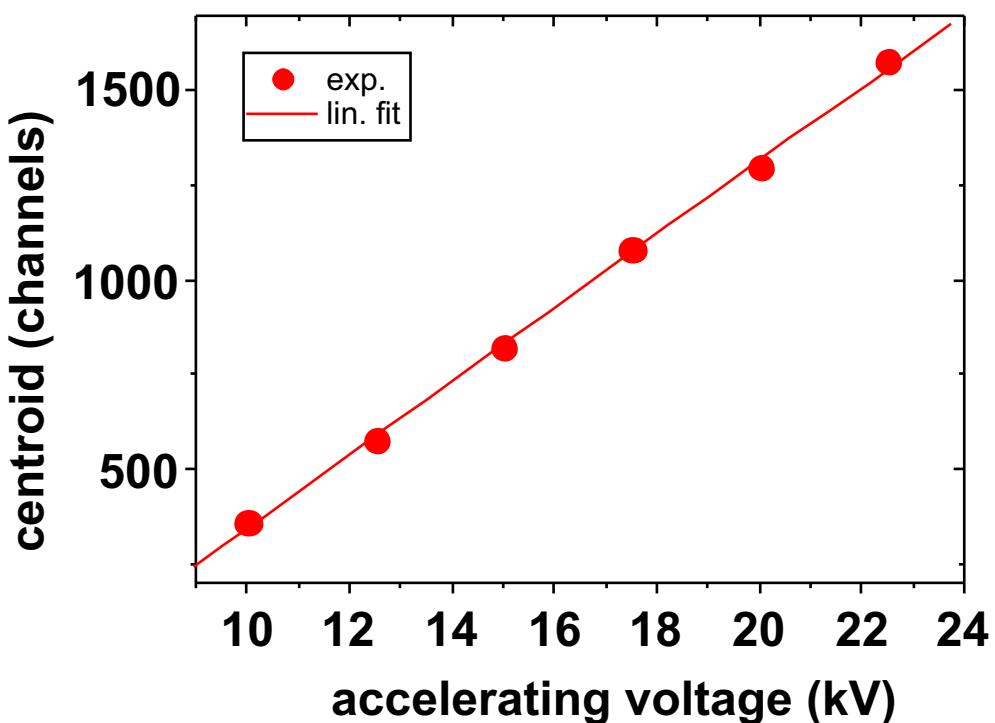
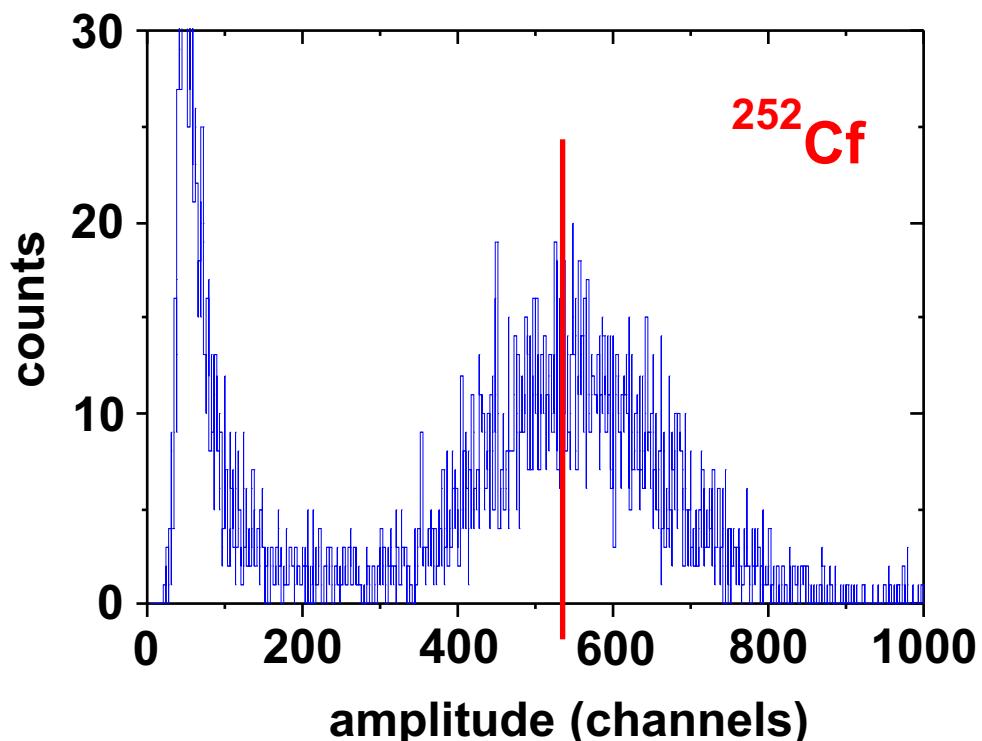
Upgrading: energy threshold

- thinner foil: 500 nm Mylar / 20 nm Al
- smaller energy loss: $E_{th}(Z = 92) \sim 4 \text{ MeV}$



Upgrading: stability

- lower PMT HV
- new preamplifier : constant gain up to ~ 1 MHz



Example: $A \sim 200$



fission/total $\sim 51\%$ $\langle v/c \rangle = 1.5\%$

