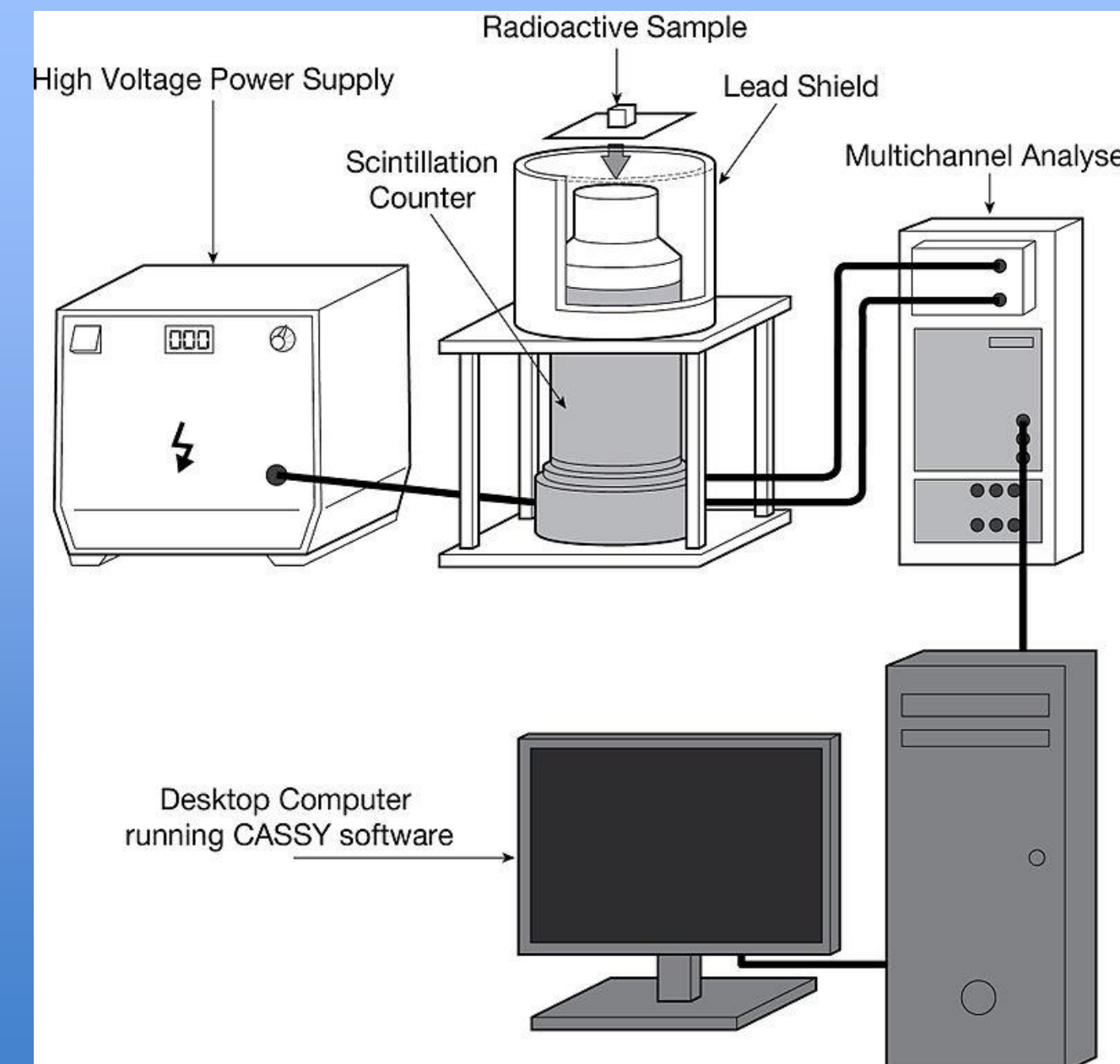
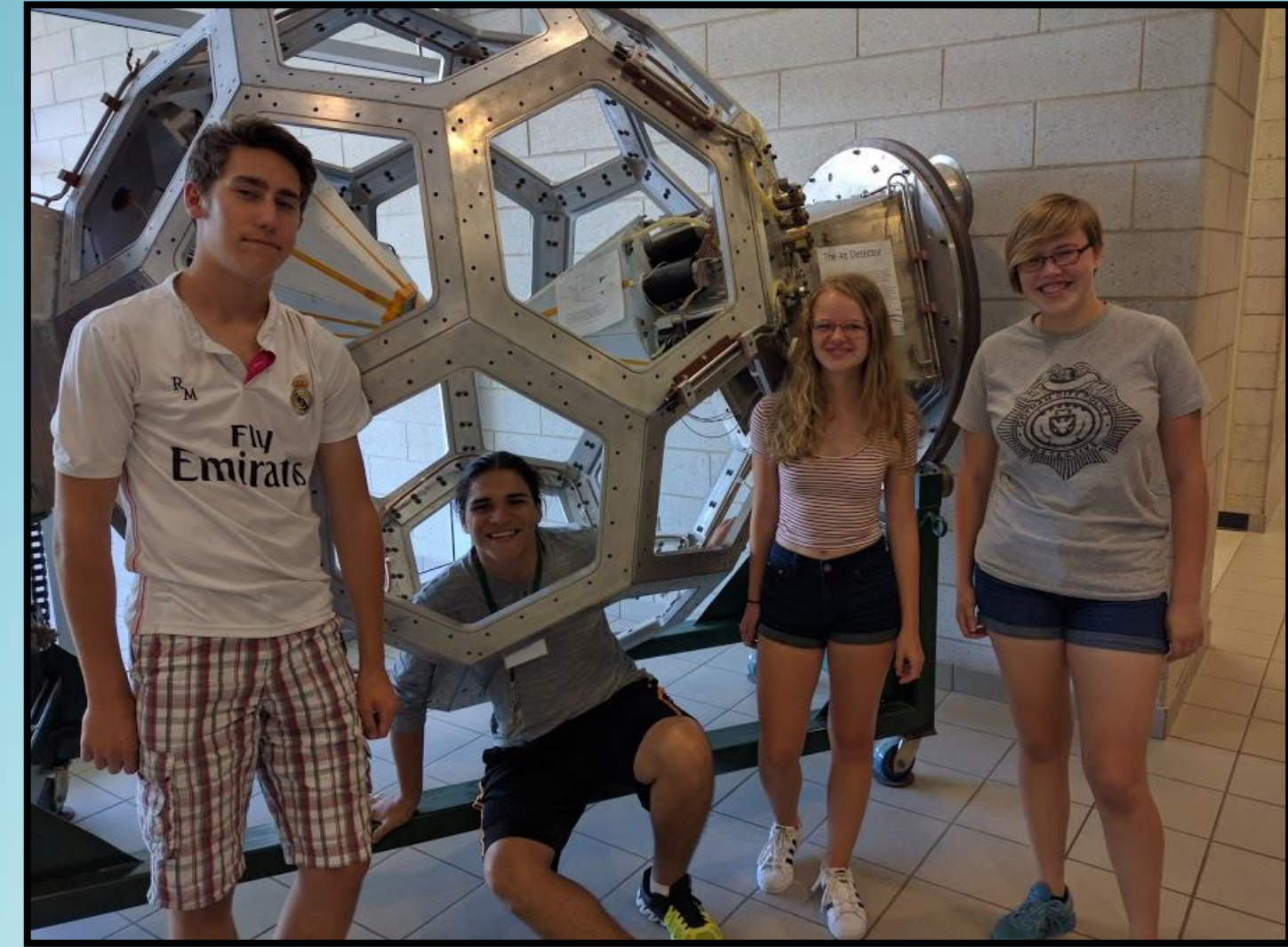
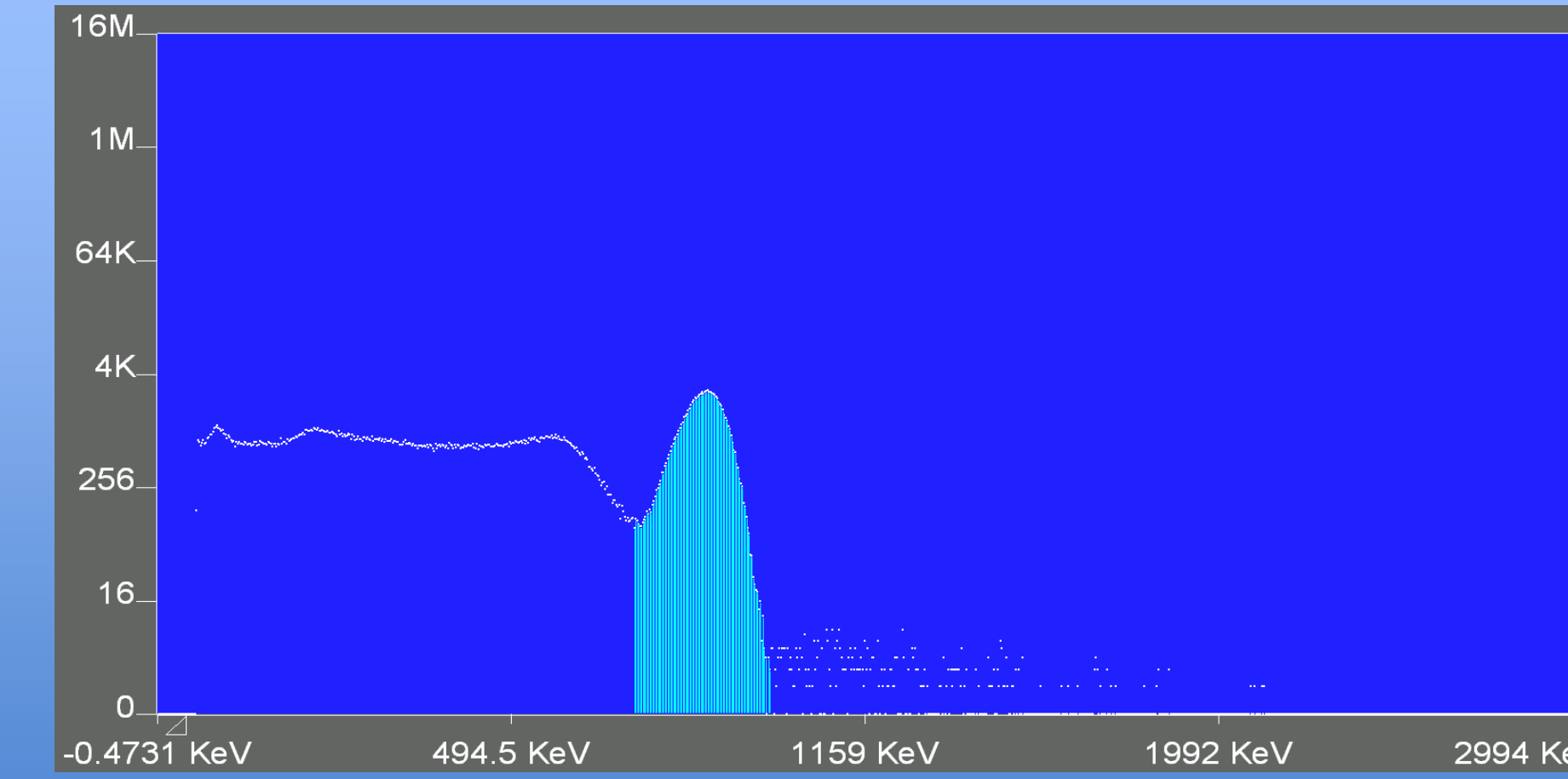


Gamma Spectroscopy



Observing the graphs of the energy levels of gamma radiation emitted from ^{60}Co and ^{137}Cs in order to calibrate the computer's ingrained correlation between channels and volts

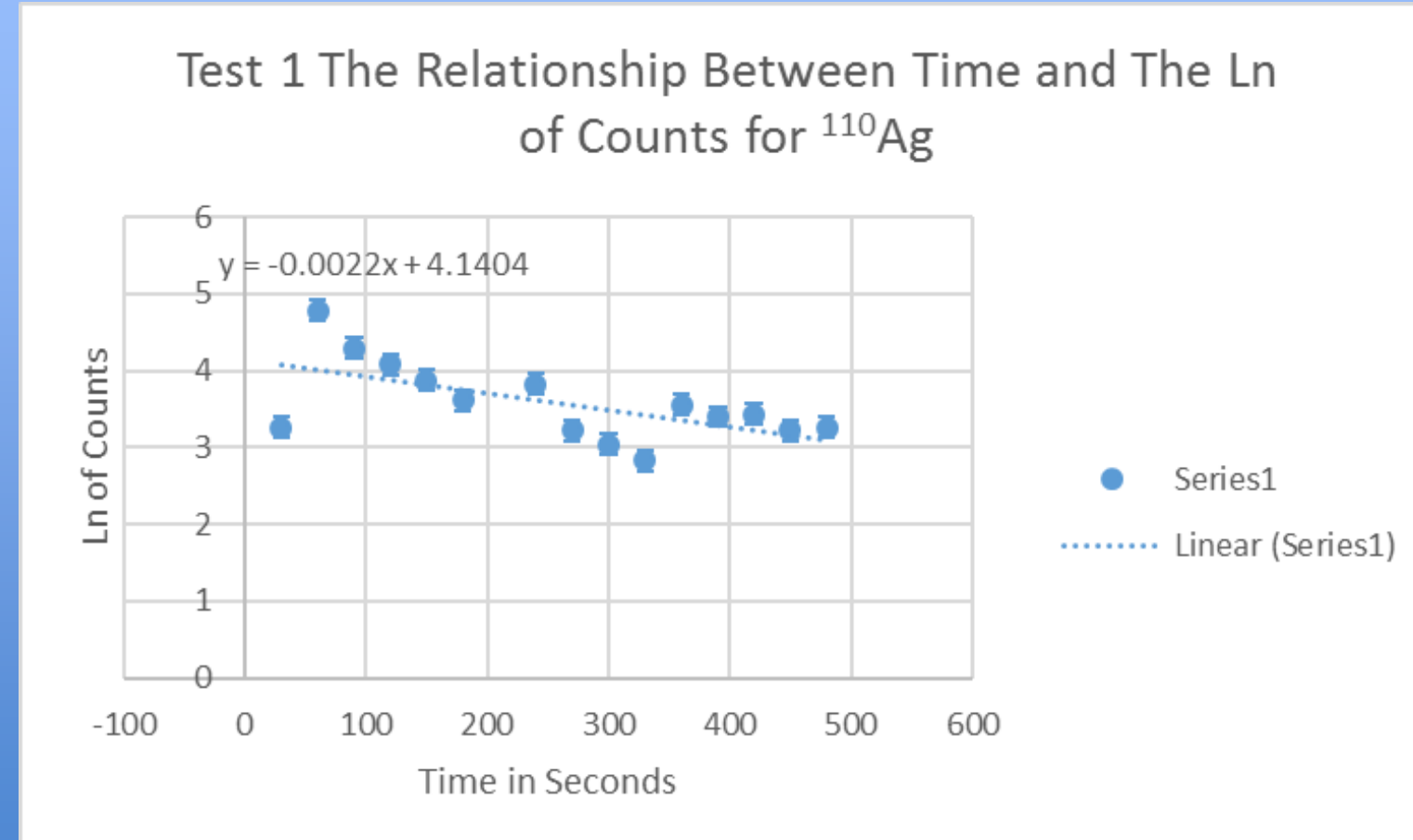


Graph of the energy levels of gamma rays emitted by an unknown isotope.

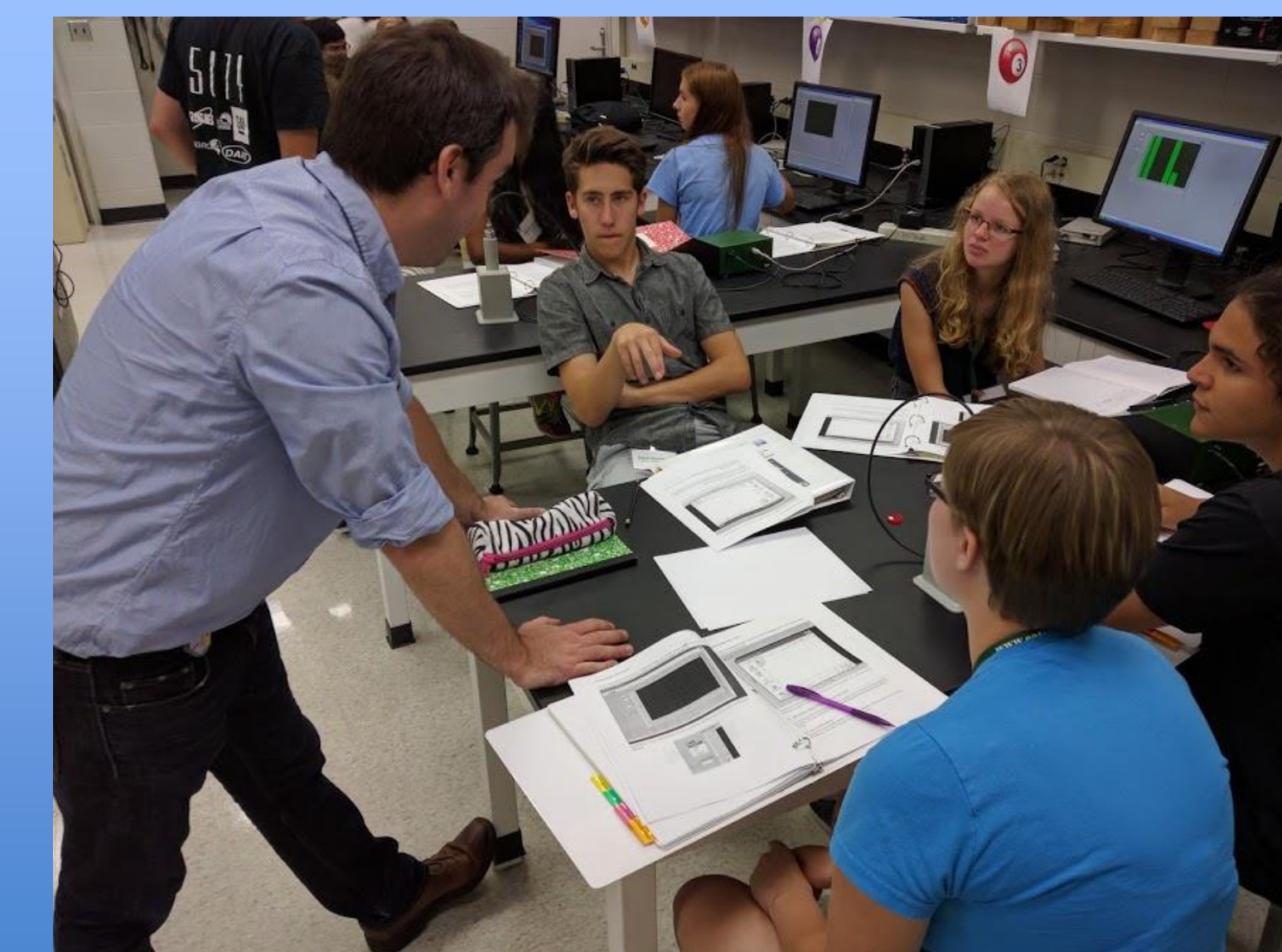
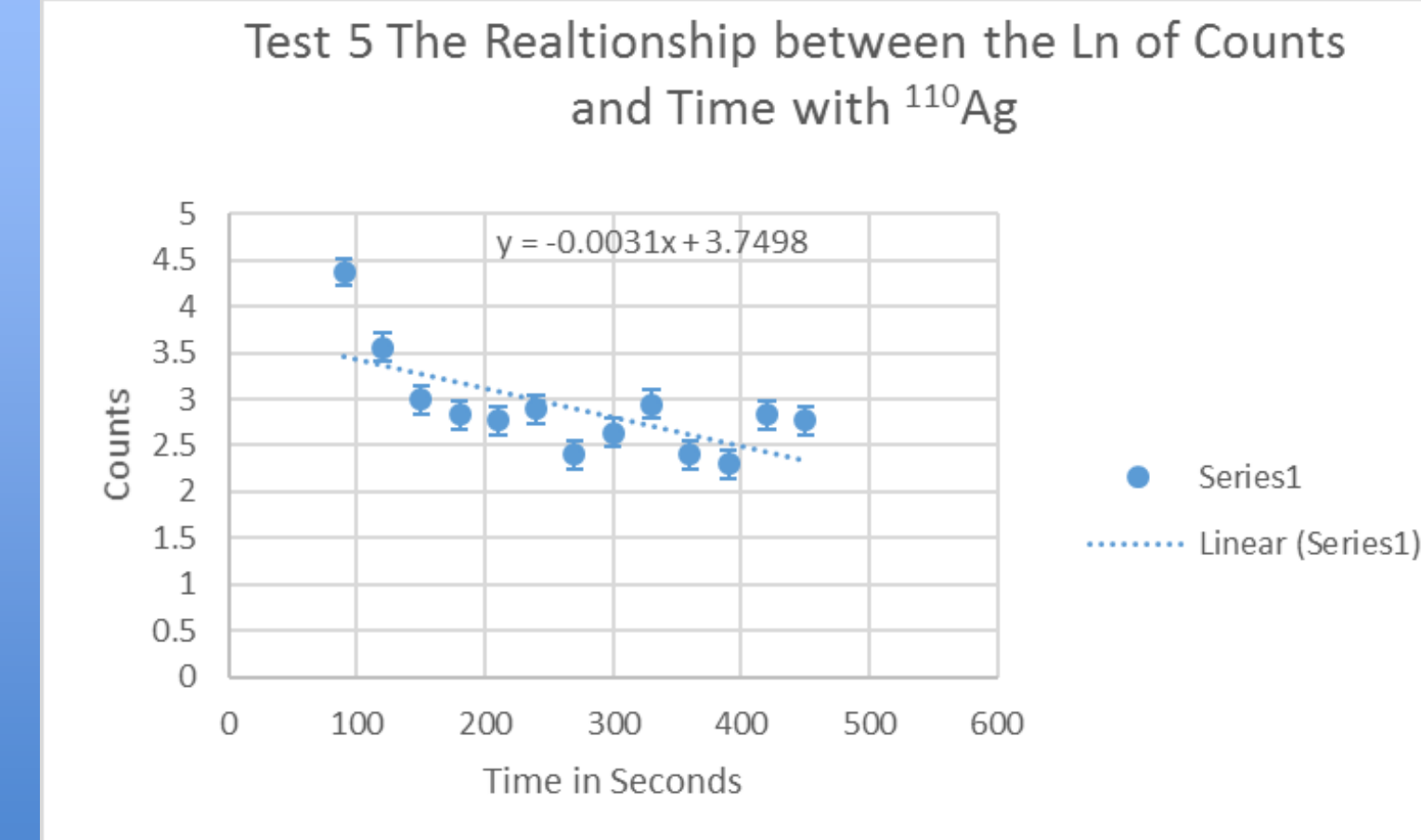
Energy (KeV)	Intensity (%)	Decay mode	Half Life	Parent
812.387	0.009	α^+	91.142	^{238}U
812.1	0.55	α^+	201.414	^{238}U
812.990	43.99	α^+	91.142	^{238}U
812.9	0.072	β^-	60.204.3	^{238}U
817.0	0.093	β^-	31.64	^{238}U
817.5	0.010	α^+	54.54	^{238}U
818.011	7.29	α^+	249.704.20	^{238}U
818.10	0.75	α^+	471.74.19	^{238}U
820.624	4.72	α^+	61.42	^{238}U
821.162	13.53	α^+	91.142	^{238}U
823.56	0.000317	α^+	137.794.4	^{238}U
828.61	0.033	α^+	54.54	^{238}U
829.77	0.015	β^-	114.43.3	^{238}U
829.948	6.71	α^+	91.142	^{238}U
832.00	0.00014624	α^+	19116.76	^{238}U
832.364	0.0008	α^+	54.54	^{238}U
832.834	0.0344	α^+	54.54	^{238}U
833.193	0.010	α^+	54.54	^{238}U
834.848	99.976	α^+	312.84	^{238}U
835.193	26.63	α^+	61.42	^{238}U
836.3	0.011	α^+	91.643	^{238}U
837.11	1.967	α^+	162.842	^{238}U
844.7	0.011	α^+	61.42	^{238}U
844.83	0.0311	α^+	31.64	^{238}U
848.80	0.046	α^+	41.29.7	^{238}U
846.771	100	α^+	77.274.3	^{238}U
847.023	0.000010	α^+	23668.19	^{238}U
850.647	0.063	α^+	106.634.4	^{238}U
851.4	0.033	α^+	54.54	^{238}U
852.002	0.0006	α^+	77.274.3	^{238}U
852.78	0.050	α^+	77.274.3	^{238}U
853.474	0.0320	α^+	91.142	^{238}U
854.6	0.034	α^+	471.74.19	^{238}U
856.8	0.0229	α^+	60.204.3	^{238}U
858.2	0.0324	α^+	54.54	^{238}U

List of possible isotopes that fit the found parameters.

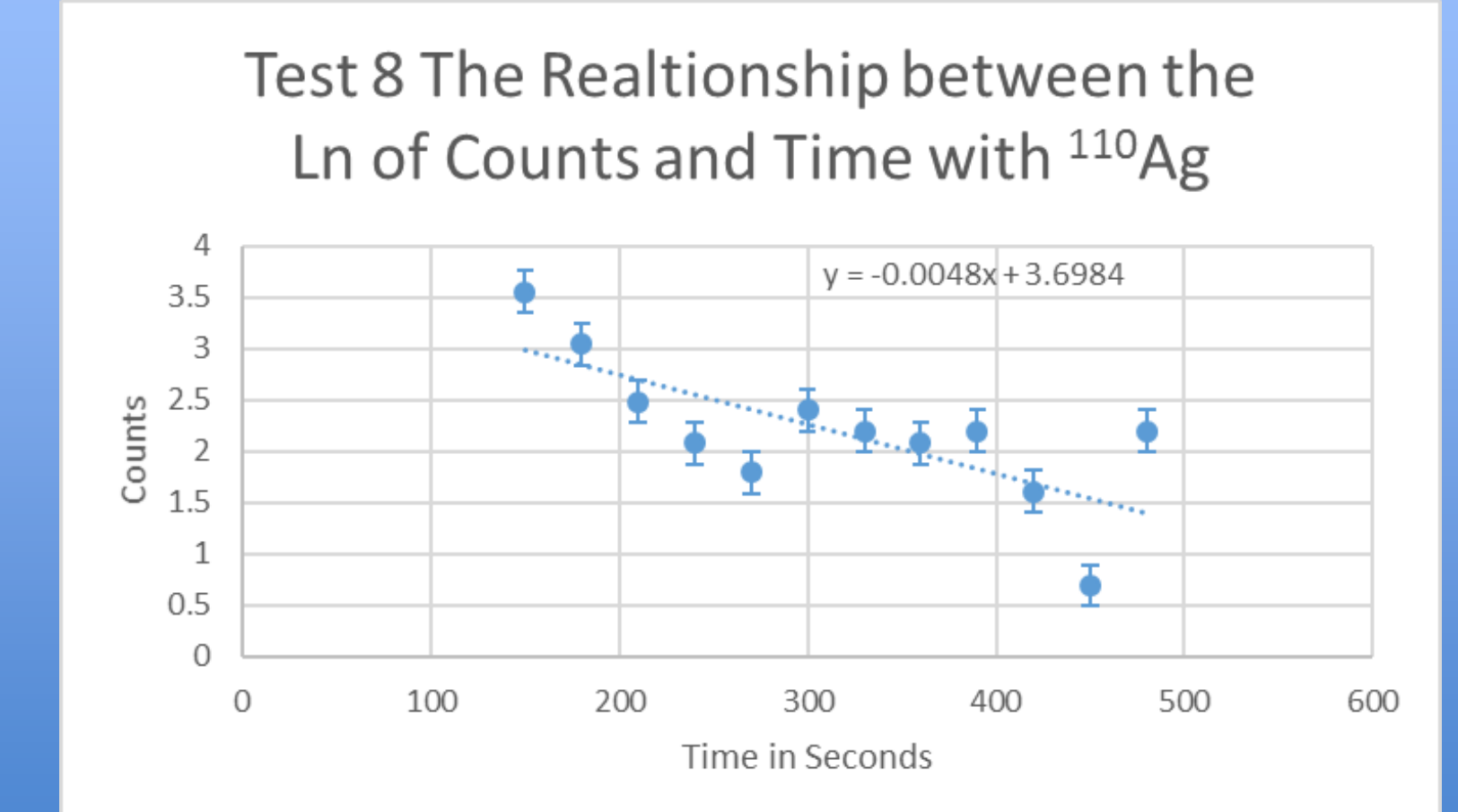
Half Life



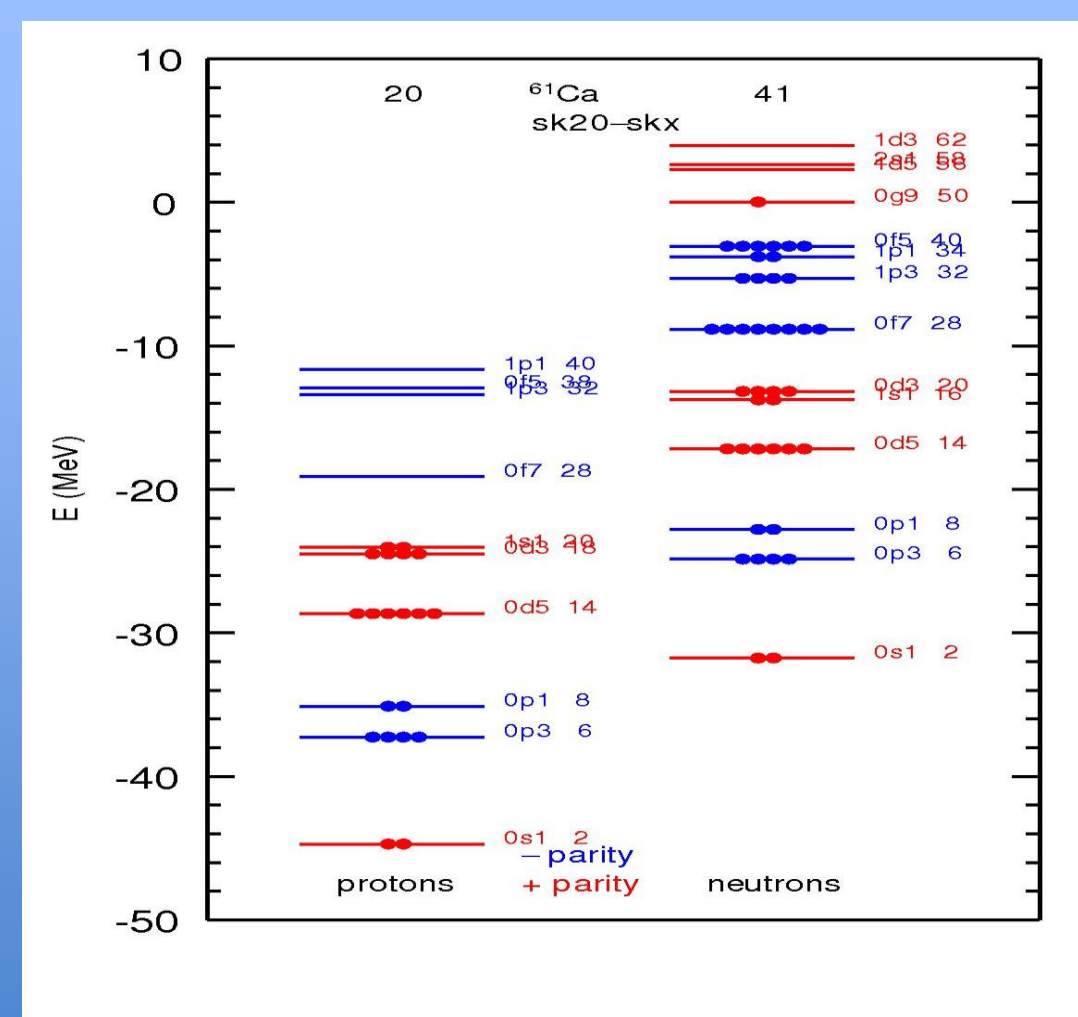
Attempting to determine the half-life of ^{110}Ag by using a Geiger-Müller Counter.



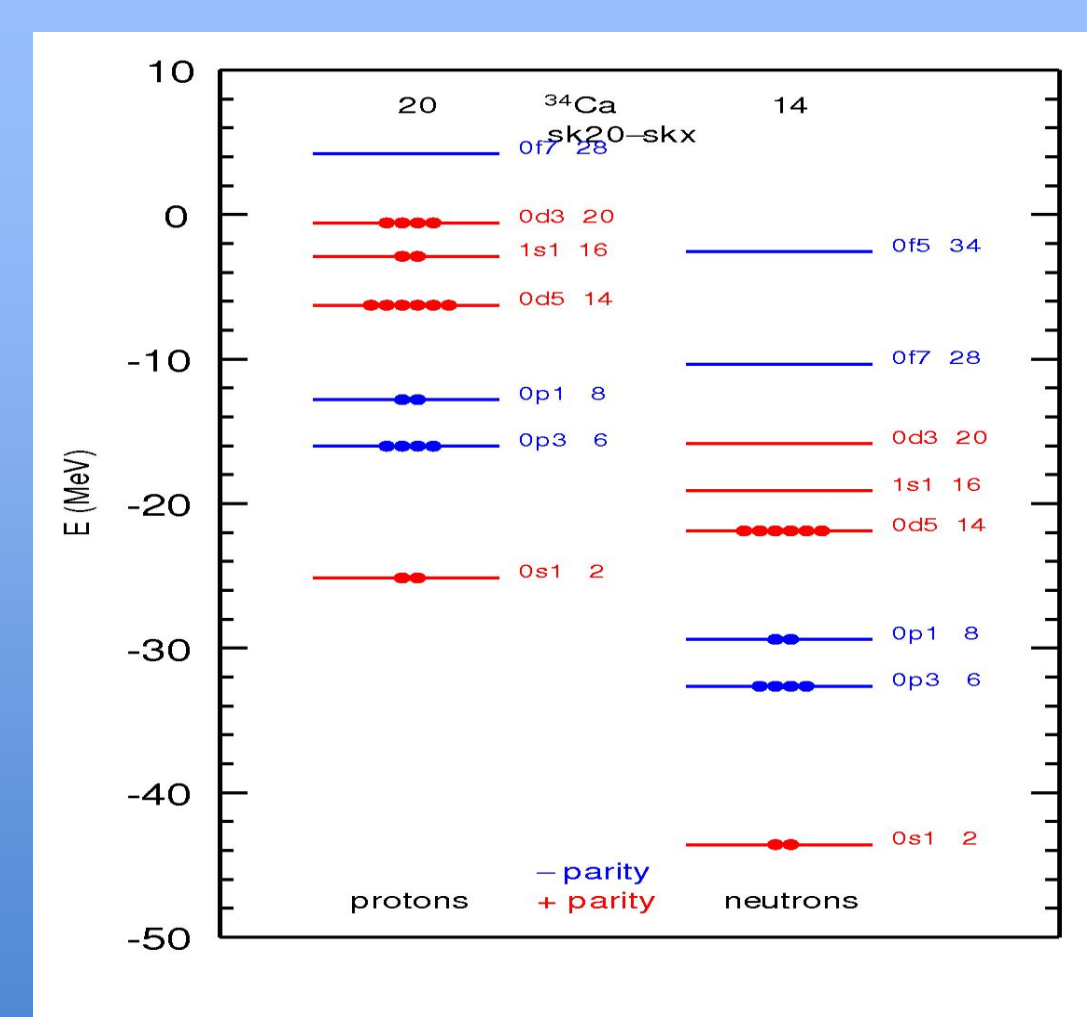
By test 10 the results were still inconsistent because of voltage fluctuations from faulty equipment.



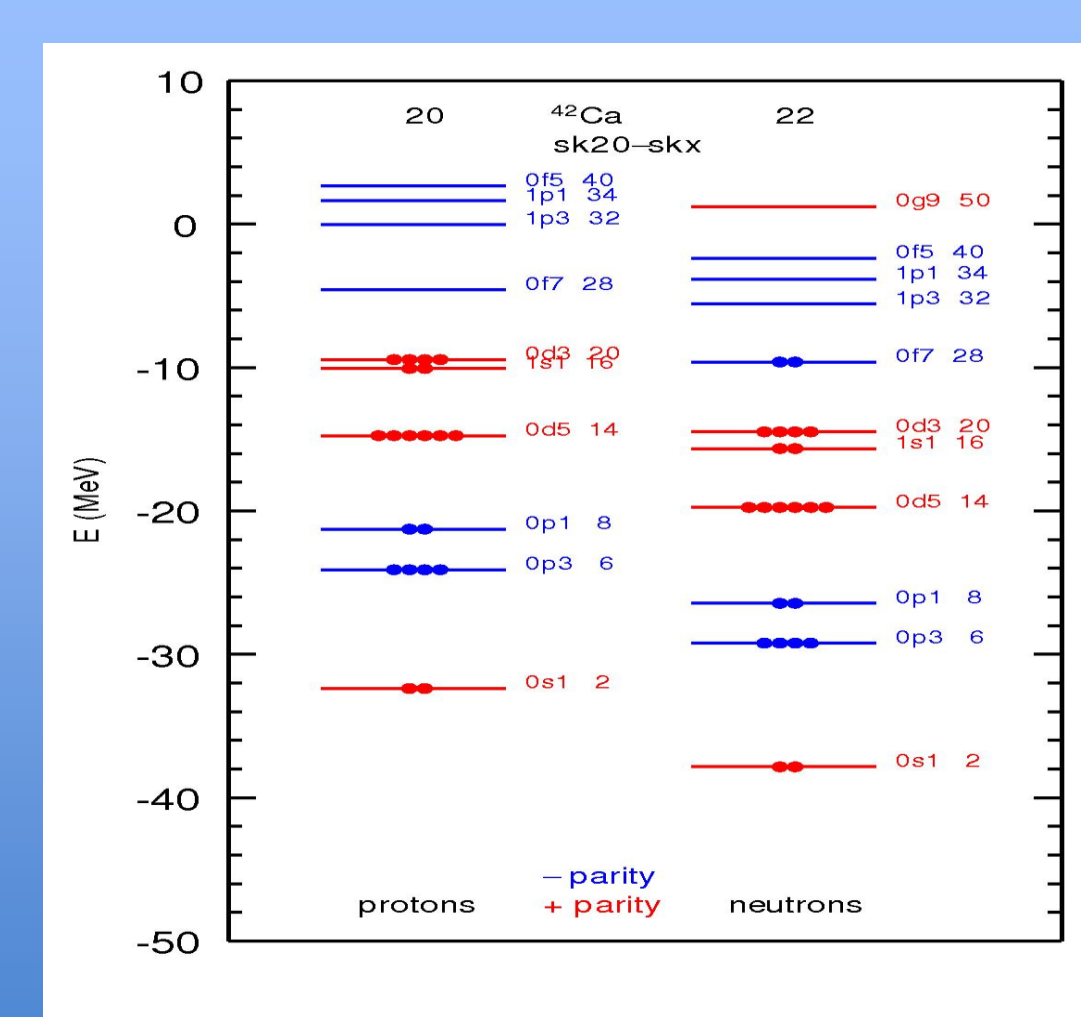
Nuclear Quantum Theory



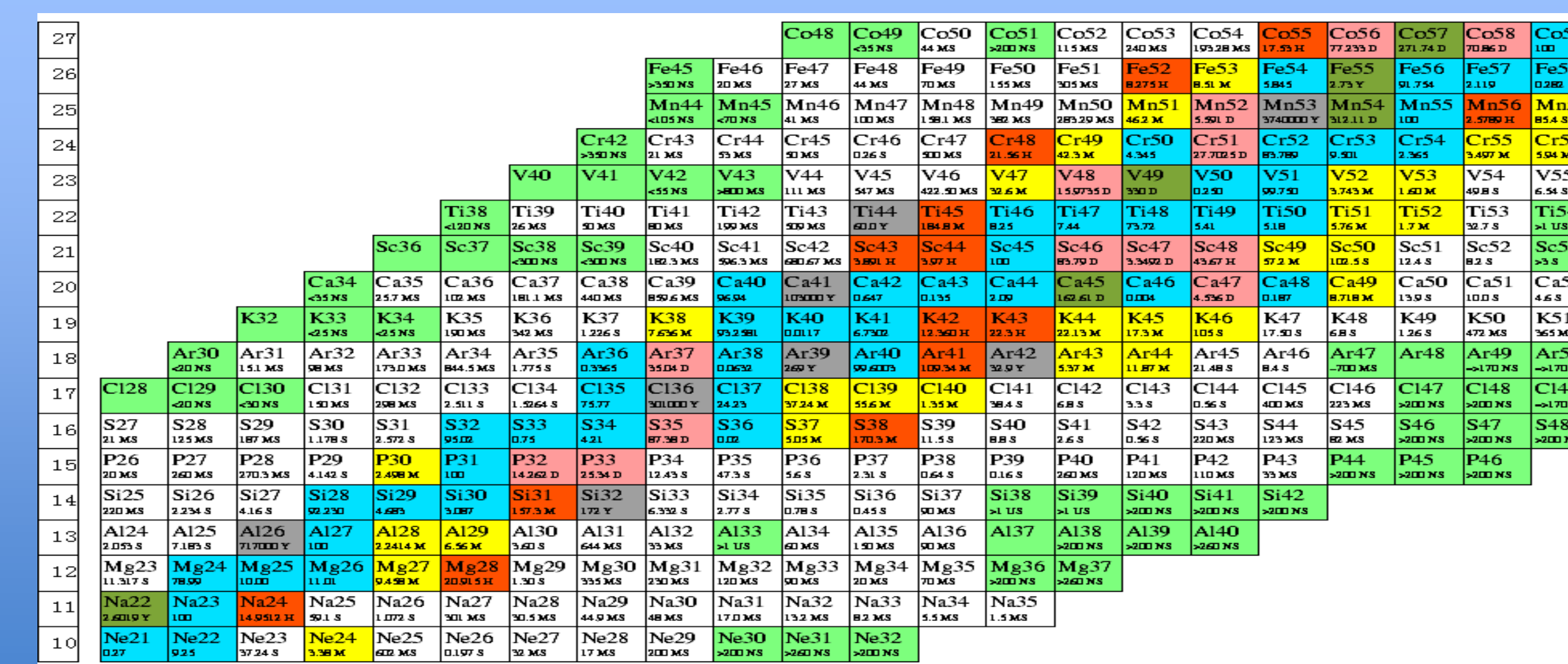
Neutron dripline for Calcium.



Proton dripline for Calcium.



Stable isotope of Calcium.



The portion of the Chart of Nuclides that contains the different isotopes of Calcium.

