

Abstract Submitted  
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**Measuring the Half-Life of  $^{60}\text{Fe}$  Data Analysis<sup>1</sup> QUINN HAILES —**

$^{60}\text{Fe}$  is a galactic gamma-radioactive isotope that is a signature of stellar nucleosynthesis.  $^{60}\text{Fe}$  can be found in deep-sea crust that could be a signature of possible recent nearby supernovae activity to the solar system. If the half-life of  $^{60}\text{Fe}$  is accurately measured we can assess how far from the earth a supernova occurred and precisely date how long ago it transpired. The half-life of radioactive isotope  $^{60}\text{Fe}$  has an accepted value of  $2.62 \times 10^6$  yr. This new value measured at the Technical University of Munich is in contradiction to the previously accepted value of  $1.49 \times 10^6$  yr. Our new experiment is to re-measure the half-life of  $^{60}\text{Fe}$  through Accelerated Mass Spectroscopy (AMS) and a low level counting station to eliminate some of the background radiation and other error in the accepted value. In my presentation I will talk about the data analysis for the activity of  $^{60}\text{Fe}$ .

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