**Single and Double Electron Event Classification Using Machine Learning for the MAJORANA DEMONSTRATOR**

Signals generated by single and double electron events are found in the dataset of the MAJORANA DEMONSTRATOR (MJD). MJD is searching for a signal due to a double electron event, so we would like to be able to filter out single electron events that pollute our signal. We show that through the use of a 10 layer convolutional neural network (CNN) in PyTorch, we can identify single and double electron waveforms generated by MaGe. The best networks have an AUC of 0.822, meaning 82.2% of the time they are correctly ranking a double electron event differently than a single electron event.