Title: Reconstructing Neutrino Energy using CNNs for GeV Scale IceCube Events

Summary: This contribution explores the resolution and runtime performance of a convolutional neural network (CNN) reconstructing the energy of 10 GeV-scale neutrino events in IceCube. It provides an alternative energy reconstruction method to apply to oscillation analyses utilizing the high-statistics 10-GeV atmospheric sample in IceCube. The training method of the CNN has been optimized to reconstruct these low light yielding interactions. The resolution is comparable to the current likelihood-based reconstruction method and the reconstruction speed is improved by 5 orders of magnitude.