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## NOvA Reconstruction using Deep Learning

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The NOvA experiment has made measurements of the disappearance of  $\nu_\mu$  and the appearance of  $\nu_e$  in the NuMI beam at Fermilab. Key to these measurements is the identification of the neutrino flavor and measurement of the neutrino energy, for which NOvA has implemented deep learning algorithms utilizing tools from the field of computer vision. These algorithms, first applied to NOvA's 2016 results, showed significant improvement over previous reconstruction methods.

I will present NOvA's implementation of deep learning algorithms using convolutional neural networks for identification of event neutrino flavor and single particles used in the 2018 analysis.

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