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Abstract for an Invited Paper  
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**The Role of Nuclear Physics in CC and NC Neutrino Reactions<sup>1</sup>**

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An overview of the role played by nuclear physics in charge-changing and neutral current neutrino and anti-neutrino reactions with nuclei will be presented in this talk. The importance of using relativistic approaches when considering modern experiments will be illustrated and the differences between modeling inclusive and semi-inclusive reactions will be emphasized. Specifically, the relativistic Fermi gas model will be discussed and its limitations made clear; independent-particle approaches will be summarized, together with comments on where they may or may not be expected to apply; and for semi-inclusive reactions, the basics of the factorized spectral function approach will be presented.

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