Neutrinos & nuclei: relevance to neutrino oscillations

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Abstract. The precise determination of neutrino properties is currently one of the most relevant aspects in fundamental physics. Several experiments on neutrino oscillations are currently in progress in different research laboratories. All of them make use of different nuclear systems; therefore, an accurate description of the neutrino-nucleus interaction, and the possible impact of nuclear effects, is essential to know the basic properties of neutrinos: oscillation parameters, mass, identity, etc.

Only through close collaboration between theoretical and experimental groups, from both the nuclear physics and high energy communities, will it be possible to overcome the challenges we face.