Abstract Submitted
for the DNP17 Meeting of
The American Physical Society

Effects of Chiral Two-Body Currents on Neutrinoless Double-Beta Decay Matrix Elements LONGJUN WANG, Univ of NC - Chapel Hill, NUCLEAR THEORY FOR DOUBLE-BETA DECAY AND FUNDAMENTAL SYMMETRIES COLLABORATION — Two-body currents in chiral effective field theory, including both one-pion-exchange and contact terms, are taken into account to correct the transition operator for neutrinoless double-beta decay. We compare the normal-ordering approximation with a more complete treatment of the many-body decay operator for the decay of ^{48}Ca, ^{76}Ge, and ^{82}Se, in various nuclear-structure models. We discuss whether two-body currents quench neutrinoless decay as much as its two-neutrino counterpart.

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Date submitted: 02 Jul 2017 Electronic form version 1.4