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Isospin-symmetry-breaking corrections to superallowed Fermi beta decay GERALD A. MILLER, Univ. of Washington, ACHIM SCHWENK, TRIUMF — We study the formalism to include isospin-symmetry-breaking corrections when extracting the up-down Cabibbo-Kobayashi-Maskawa matrix element from superallowed $0^+ \rightarrow 0^+$ nuclear beta decay. We show that there are no first order isospin-symmetry-breaking corrections to the relevant nuclear matrix elements. We find corrections to the treatment of Towner and Hardy, and assess these using schematic models of increasing complexity.

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