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Looking for Nothing: Experimental Searches for Neutrinoless Double-Beta Decay

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Substantial efforts are underway across the globe to test a claimed observation of neutrinoless double-beta decay and to probe the large parameter space corresponding to inverted-hierarchy neutrino masses. In this talk, I will discuss the importance of these efforts and give an overview of the experimental techniques being fielded. I will present an update on the current global status of the field, including searches ongoing and under construction. I will also discuss challenges and prospects for future searches with improved sensitivity capable of definitively testing the Majorana nature of the neutrino for the inverted hierarchy.