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The Way Forward for Neutrinoless Double Beta Decay Using Liquid Xenon

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Abstract: The search for neutrinoless double beta decay is a very high priority for the astroparticle physics community. In this note I will argue that the focus of new facilities for this search should be aimed at reaching the bottom of the normal hierarchy band. I will focus on ways in which current liquid xenon experiments might achieve the required energy and spatial resolutions to achieve the required background levels. The realities of the world xenon production capabilities imply that this project should be done as a global initiative and the best time to build such collaborative effort is now when everyone can contribute to the development of the design.

Collaboration you are representing

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