

## Double Beta Decay as a Probe of New Physics

*Friday 1 July 2022 12:00 (30 minutes)*

Neutrinoless double beta decay is crucial in determining the nature of neutrinos, and thereby the mechanism beyond the Standard Model (SM) with which they acquire their masses. I will review searches for neutrinoless double beta decay and discuss the prospects and consequences of observing neutrinoless double beta decay. I will likewise highlight related modes such as Majoron emission and two-neutrino double beta decay. The latter, SM-allowed process is being measured with increasing precision as experiments become more sensitive and can itself be used as a probe of New Physics.

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**Session Classification:** Morning Session