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When backgrounds become signal: neutrino detection with xenon detectors

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Large target masses and ultra-low background levels are now becoming commonplace for xenon-based rare event searches. As a result, current and future experiments will have unprecedented sensitivity to astrophysical neutrinos in multiple interaction channels. In this talk I will provide a brief overview of relevant neutrino sources and their interaction channels in xenon-based experiments while highlighting a subset of physics studies that can be carried out using neutrinos as a signal.

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