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Tritium Background for Direct Dark Matter Search

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Direct dark matter searches require an ultra-low background, which is essential to improving sensitivity. Many efforts have been made to reduce and understand these techniques.
XENON1T observed an event excess at 1-7 keV in 2020, but not in XENONnT, which is thought to be background due to tritium. Quantitatively assessing this background is useful for future experiments.
In this talk, I will present measurements of atmospheric tritium by sampling HTO and HT and discuss an impact on the direct dark matter experiments with LXe.

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