Background mitigation for the SNO+ experiment

Tuesday, August 20, 2024 1:55 PM (10 minutes)

The SNO+ experiment will be a liquid scintillator detector with tellurium-130 as the decay source. SNO+ aims to detect neutrinoless double beta decay, a radioactive decay proposed by theory as an extremely rare decay whose existence could answer fundamental questions in physics. Due to the rare nature of the neutrinoless double beta decay, the mitigation of background reactions is essential for the sensitivity of the experiment. In this talk, I will summarize the challenges posed to the SNO+ experiment by various background sources, and the efforts ongoing to minimize these effects.

What area of study best describes your talk?

Physics

If you answered 'Other', please provide the study area.

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