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## Nuclear recoil calibration for rare event searches

*Wednesday, 8 November 2023 16:00 (15 minutes)*

Detection of nuclear recoil events plays a central role in dark matter and neutrino scatter experiments. Precise nuclear recoil calibration data allow the responses of these detectors to be characterized and enable in situ evaluation of an experiment's sensitivity to anticipated signals. Using a few examples, we discuss the main experimental factors that are critical for accurate nuclear recoil calibrations, investigate mitigation strategies for different backgrounds and biases, and discuss how the presentation of calibration results can facilitate comparison between experiments.

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### Early Career

Yes

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