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Type: **Experiment**

Calibration of ~ 100 eV Nuclear Recoil with the CRAB Method

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The aim of the CRAB method is to calibrate the response of low-background and very low threshold bolometric crystals, with direct impact on the study of coherent elastic neutrino-nucleus scattering and dark matter searches. It consists of a neutron capture on a nucleus of the crystal followed by a gamma-deexcitation, producing a nuclear recoil with a well-known energy. This provides a Thus calibration peaks associated to various isotopes of the target can be induced in the spectrum of nuclear recoils.

After presenting the principle of the CRAB method and its first experimental validations with CaWO_4 crystals, we will discuss the underlying rich program of physics accessible by more accurate measurements, crossing particule, nuclear and solid state physics. The implementation of such accurate measurements in the coming year at the Atominstitut in Vienna is discussed in another talk.

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