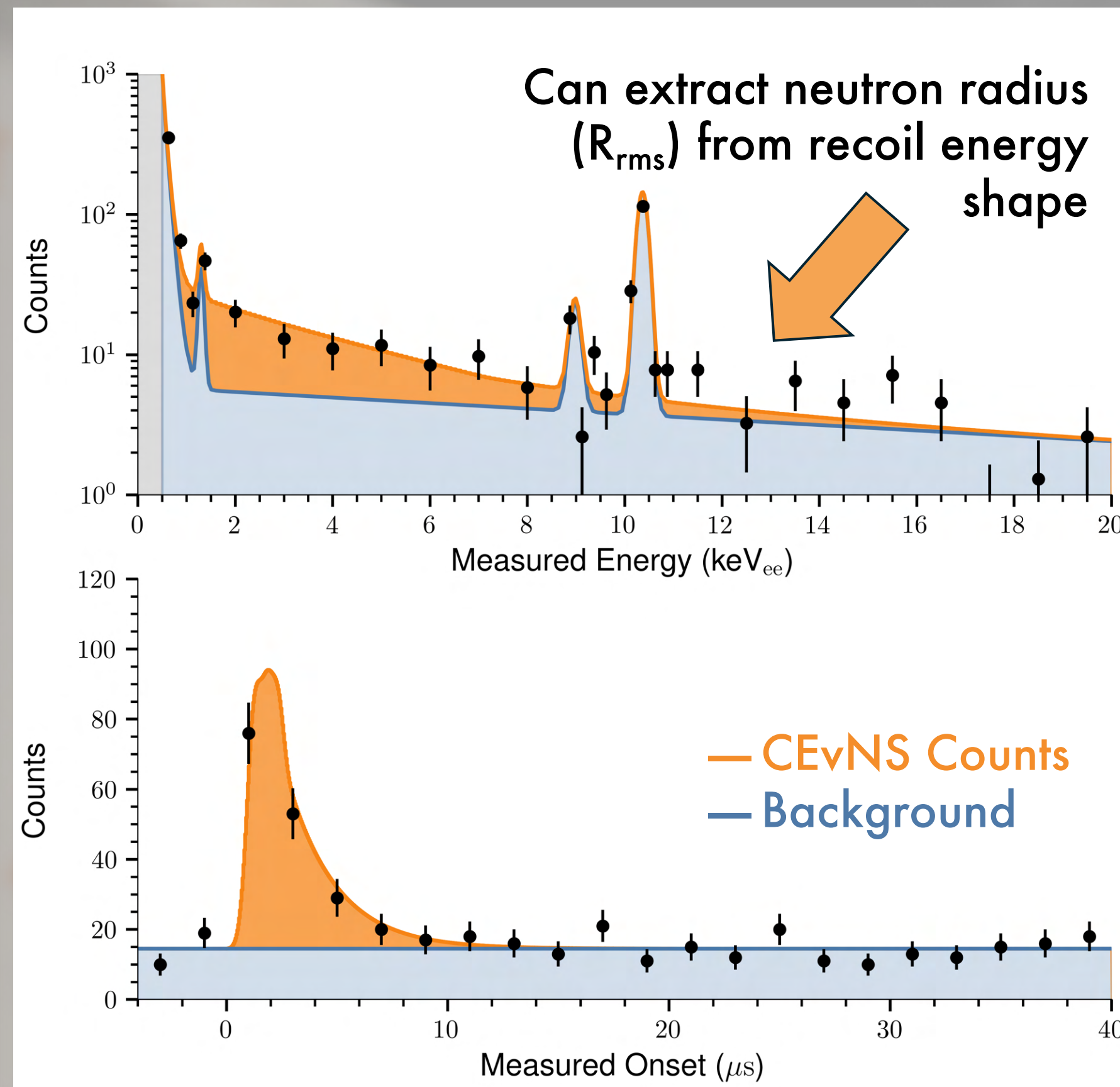


Probing Nuclear Physics with COHERENT's Ge-mini

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Many possible Form Factor model parameterizations:

$$F_{KN}(Q) = 3 \frac{j_1(QR_0)}{QR_0} \frac{1}{1 + (Qa_k)^2}$$

$$F_{Helm}(Q) = 3 \frac{j_1(QR_0)}{QR_0} e^{-\frac{1}{2}(Qs)^2}$$

$$(R_0 = 1.2A^{1/3})$$

Other options are Skyrme, Symmetrized Fermi, etc.

Coherent elastic neutrino-nucleus scattering is suppressed at higher momentum transfer due to the nuclear form factor.

Recent CEvNS results on Ge allow extraction of the rms neutron nuclear radius.

