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## Coherent neutrino scattering and the Migdal effect

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Recent measurements of the germanium quenching factor deviate significantly from the predictions of the standard Lindhard model for nuclear recoil energies below a keV. This departure may be explained by the Migdal effect in neutron scattering on germanium. In this talk, we will discuss the Migdal effect on the quenching factor. We show it can mimic the signal of a light  $Z'$  or light scalar mediator in coherent elastic neutrino-nucleus scattering experiments with reactor antineutrinos. It is imperative that the quenching factor of nuclei with low recoil energy thresholds be precisely measured close to threshold to avoid such confusion. This will also help in experimental searches of light dark matter.

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