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## **The neutrino background to direct detection of dark matter**

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Dark matter detectors are rapidly improving in sensitivity, and as they continue to increase in size and reduce thresholds, they will encounter the neutrino background, at which point Solar, atmospheric, and diffuse supernova neutrinos will interfere with a potential dark matter signal. Neutrino interactions in these detectors will occur through both coherent neutrino-nucleus scattering (CNS) and neutrino-electron elastic scattering (ES). In this talk, I will discuss how this neutrino background will drastically affect the discovery potential of upcoming ton-scale dark matter experiments. I will also review how we can go around this ultimate neutrino bound by combining data from different experiments, by searching for deviations in the annual modulation of the event rate and by measuring the direction of the recoiling nuclei.

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**Classification de Session:** VHE and Dark Matter

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