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Abstract for an Invited Paper for the APR21 Meeting of the American Physical Society

Direct Dark Matter Detection above the Proton Mass

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The direct search for dark matter is an exciting field of particle physics. Many different experiments using many different techniques are looking for this particle, which remains elusive to this day. In this talk, I will focus on the current and future experiments looking for WIMP dark matter with masses above 1 GeV, particularly, liquid noble detectors based on xenon and argon that have provided the most competitive searches for WIMP dark matter, having probed orders of magnitude in cross section over the past decades. The upcoming, high discovery potential experiments, LZ and XENONnT, will be highlighted, as well as the plans for future G3 experiments, where sensitivity to WIMP-nucleon cross sections down to the neutrino floor will be reached.