

Color centers as detectors for low mass dark matter

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With direct searches getting closer and closer to the neutrino floor, the classical WIMP remains as elusive as ever. The low hanging WIMP fruit will eventually be exhausted as the remaining parameter space is excluded. The need for expanding our sensitivity to lower masses is evident. I will present a novel technique for direct detection by measuring defects in crystals with high sensitivity. These defects can be induced by the eV scale nuclear recoils expected from interaction with low mass dark matter. I will then report on the progress made so far in testing the viability of such a detector.

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