WIMPs Are Stronger When They Stick Together

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Elusive weakly interacting massive particles (WIMPs) remain the strongest candidates for the dark matter in the Universe. If WIMPs are the dark matter, they will form a clumpy halo around our Galaxy due to hierarchical clustering as observed in CDM simulations. The clumpy nature of the halo can enhance the possibility of detecting WIMP dark matter via annihilation. We present a calculation of radio synchrotron flux of dark matter clumps, resulting from electrons and positrons generated as decay products of WIMP annihilation in the Galactic magnetic field. We find that the radiation may be distinguishable as a point source foreground distortion in observations of the CMB.