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## Radio and Microwave Constraints on Dark Matter

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Radio and Microwave observations of the inner Milky Way have the potential to see synchrotron emission from  $e^+e^-$  produced by certain WIMP models, especially those models with a large enough cross section to produce the PAMELA positrons. However, the radio and microwave emission produced by conventional astrophysics contributes significantly to the observed signals, and is not fully understood. I will review the status of the observations, and focus on the “haze,” a large two-lobed structure spanning  $\pm 20$  deg in longitude and  $\pm 50$  degrees in latitude. Parts of this structure appear in microwaves, xrays, and gamma-rays. I will argue that this structure – though very interesting – is unlikely to be related to dark matter. Further study of it is needed, both in its own right, and because it prevents us from realizing the full power of the inner galaxy constraints on DM annihilation and decay.

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