## XVIII International Conference on Topics in Astroparticle and Underground Physics (TAUP 2023)



Contribution ID: 71 Type: Parallel talk

## The self-confinement of electrons and positrons from dark matter

Wednesday 30 August 2023 14:00 (15 minutes)

In this talk, I will discuss how the injection of electrons and positrons from dark matter (DM) annihilation or decay can generate magnetic turbulence in galaxies.

This effect sets a lower limit to the (self-)confinement of the electrons and positrons and thus to their expected radiative emission.

I will specifically apply this approach to the study of synchrotron radiation in dwarf spheroidal galaxies, showing bounds on WIMP DM obtained from radio observations of the Draco galaxy at the Giant Metre Radio Telescope.

## Submitted on behalf of a Collaboration?

No

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